

Mapping policy approaches and practices for the inclusion of students with special education needs**OECD Education Working Paper No. 227**

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Abstract

Across OECD countries, there are various and diverse policy approaches in place to promote inclusive education systems for students with special education needs (SEN), understood as learning disabilities, physical impairments and disorders related to mental health. Analysing current policies in place across OECD countries and investigating advantages and disadvantages of diverse policy approaches for students with SEN is important when acknowledging non-negligible disparities in terms of enrolment, graduation, and employment outcomes for students with SEN across OECD countries. Overall, educational approaches to address students with SEN have historically shifted from placing students in special school settings to more mainstream education environments. However, differences still exist in the extent to which students are mainstreamed in schools with the rest of the students. Furthermore, education systems differ in the way they design and implement governance arrangements, resourcing systems, capacity-building, school-level interventions, and monitoring and evaluation of their policies in place to support students with SEN. Through a holistic approach, the following desk-based research adopts the analytical framework developed by the OECD's *Strength through Diversity* project, *Education for Inclusive Societies*, to map policy approaches to include students with SEN in education systems and promote their well-being. The review also investigates how special education needs intersect with other forms of induced diversity in education systems and other emerging trends across countries to provide a more comprehensive analysis of the issues at stake.

Résumé

Dans les pays de l'OCDE, il existe une grande variété d'approches politiques destinées à promouvoir des systèmes éducatifs inclusifs pour les élèves ayant des besoins éducatifs particuliers (BEP), c'est-à-dire présentant des troubles d'apprentissage, des déficiences physiques et des troubles liés à la santé mentale. Il est important d'analyser les politiques actuelles en place dans les pays de l'OCDE et d'étudier les avantages et les désavantages de diverses approches politiques pour les étudiants ayant des BEP tout en reconnaissant des disparités non négligeables en termes d'inscription, de diplomation et d'emploi pour les étudiants avec des BEP dans les pays de l'OCDE. Dans l'ensemble, les approches pédagogiques pour répondre aux besoins des élèves ayant des BEP sont historiquement passées du placement de ces élèves dans des établissements scolaires spéciaux à leur insertion dans des environnements éducatifs plus inclusifs. Cependant, des différences subsistent dans la manière dont les élèves sont inclus dans les écoles avec le reste des élèves. En outre, les systèmes éducatifs diffèrent quant à la façon dont ils conçoivent et mettent en œuvre les dispositifs de gouvernance, les systèmes de ressources, le renforcement des capacités, les interventions au niveau de l'école et le suivi et l'évaluation de leurs politiques en place pour soutenir les élèves avec des BEP. À travers une approche holistique, cette recherche adopte le cadre analytique développé par le projet La Diversité Fait la Force de l'OCDE : L'Éducation pour des Sociétés Inclusives pour répertorier les approches politiques visant à inclure les élèves ayant des BEP dans les systèmes éducatifs et à promouvoir leur bien-être. Le document examine également la manière dont les besoins éducatifs particuliers recoupent avec d'autres formes de diversité présentes dans les systèmes éducatifs et identifie d'autres tendances émergentes dans différents pays afin de fournir une analyse plus complète des enjeux actuels dans ce domaine.

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Introduction

Several OECD countries are promoting policies to include students with special education needs (SEN) in more inclusive school settings. This comes after decades of international debate and a number of international conventions recognising the rights of students with SEN. In response, countries have developed a range of different education policies and practices to support students with SEN in accessing and achieving an education. Despite these efforts, evidence still shows significant disparities in terms of enrolment, graduation, and employment outcomes for students with SEN. Therefore, ensuring high-quality educational opportunities for students with SEN becomes key to promoting the well-being of all. This review maps some of the key policy approaches and practices used by OECD countries to address students with SEN in their classrooms, schools and education systems.

This literature review is part of the OECD project *Strength through Diversity: Education for Inclusive Societies*, which explores six dimensions of diversity found within student populations to help better understand how education can become more inclusive. These dimensions of diversity are migration (on which the first phase of the project was focused); special education needs; gender, gender identity and sexual orientation; ethnic groups, national minorities and Indigenous peoples; and giftedness. These dimensions are considered in relation to each other (their intersectionality) and the overarching dimensions of socio-economic status and geographic location.

The review focuses on five main policy approaches identified in the Design and Implementation Plan for the *Strength through Diversity* Project (OECD, 2019^[1]). These relate to governing, resourcing, developing capacity, promoting school-level interventions, and evaluating and monitoring policies and approaches. Based on the cross-country mapping exercise, the review presents the main advantages and disadvantages of internationally discussed SEN policies and practices. Whenever possible, the review presents empirical evidence on the effectiveness of different approaches in promoting the overall well-being of students. To carry out the analysis, the review is built on desk-based research on the various approaches to addressing students with SEN across 21 OECD countries (listed in Annex A). Acknowledging significant differences in the ways education systems define and understand SEN, the review adapted an operational definition of special education needs, as presented in the *Strength through Diversity* project. This includes learning disabilities, physical impairments and mental disorders (OECD, 2019^[1]).

1. Defining special education needs (SEN)

The way in which special education needs are conceptualised and understood shapes policy approaches and practices used to provide education to students with SEN. Therefore, a theoretical framework is necessary to define SEN as a foundation for mapping cross-country policy approaches. This section introduces the main theoretical models used to discuss disability and functioning. It also provides a general historical perspective on how education provision for students with SEN has evolved across countries. Against this background, the section presents the operational definition of special education needs in line with the OECD *Strength through Diversity Project: Education for Inclusive Societies*, which includes learning disabilities, physical impairments and mental disorders.

1.1. Conceptualising disability and functioning

Historically, three main paradigms of disability and functioning have shaped policies and practices across countries. These are the medical, social, and biopsychosocial models of disability. Main differences reside in the ways in which the three paradigms understand a person's disability with respect to the environment they live in and the political interventions, policy targets and means necessary to respond to the needs arising from the disability (Table 1.1).

Table 1.1. Medical, social and biopsychosocial models of disability

	Definition	Target	Means	Political intervention
Medical	Disability directly caused by trauma or health conditions	Individual changes	Medical care	Reforming health care policy
Social	Incomplete integration of individuals in society/environment	Social environment generating a complex collection of conditions	Social action	Considering the question of human rights
Biopsychosocial	Disability as a mismatch between an individual and their capabilities with respect to the requirements of the environment they are in	Analyse the environment and accommodate it so it becomes more suitable to a person's disability.	Multidimensional	Multidimensional and functional responses to reduce the gap between the person's capabilities and the environment

Source: WHO (2007_[2]).

1.1.1. Medical model

The medical model understands disability as a “problem of the person, directly caused by disease, trauma or other health condition, which requires medical care provided in the form of individual treatment by professionals” (WHO, 2007, p. 18_[2]). Under this model, disability is only limited to the definition of impairment, i.e. a problem in a body function or alteration in the body structure.

The model centres the question of educating a person with disability *around* their impairment and the manners to minimise it. A common example used to understand the perception of a disability under the medical paradigm concerns accessibility for wheelchair

users. If a person using a wheelchair cannot access a building, the medical model acknowledges the individual in a wheelchair as the issue, not that the building does not have a ramp.

1.1.2. Social model

To address the shortcomings of the medical model, the social model emerged as an alternative framework in the 1970s and 1980s. The origins of the social model of disability in education policy are rooted in the 1978 Warnock Report. The Report introduced the term *special education needs* and recommended models of integration and inclusion for students with SEN in mainstream settings through curriculum modifications, additional resources and specialised training for teachers (Section 1.2.1).

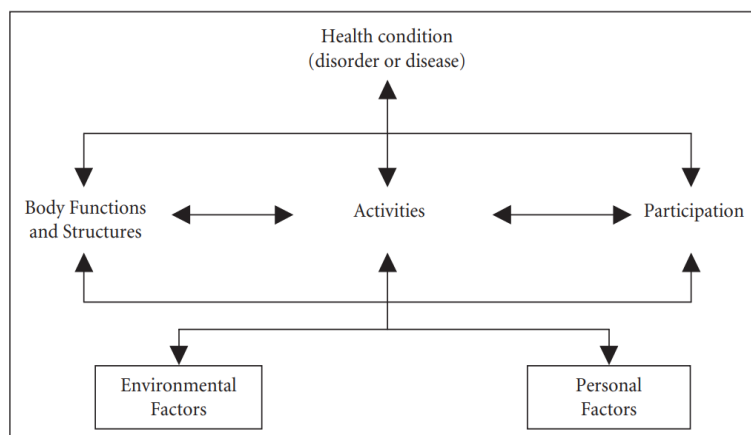
Unlike the medical paradigm, the social model considers that the main issue arising from a disability resides in the low integration of the individual in society. Therefore, this model acknowledges individuals with disabilities as being disabled not because of their disability but due to society's failure to meet their needs. As a treatment, the model envisions collective action to modify the environment and allow individuals, regardless of their disability, to equally participate in all domains of public life (WHO, 2007^[2]).

For example, under the social model, a ramp would be added to allow a wheelchair user to access a building, thus accommodating the environment to suit a person's disability. Furthermore, the social model envisions not only improving accessibility to school structures and facilities but calls for more comprehensive reforms to ensure that education systems meet the needs of all students. Numerous social movements have developed from this model, such as the Disability Pride and Learning Disability Pride, which aim to confront longstanding challenges faced by individuals with disabilities and students with SEN (Disabled World, 2015^[3]; Learning Disability Pride, 2019^[4]).

1.1.3. Biopsychosocial model

The biopsychosocial model was first theorised in the late 1970s to provide a more holistic approach to understanding disability and impairment compared to the medical model. It acknowledges a person's well-being as something dependent on the different biological, psychosocial and societal responses to their disability. It considers both social and medical interventions as appropriate to address disability and does not reject either of them as forms of intervention (World Health Organization, 2002^[5]). The approach recommends that an education system should analyse the environment of a student with a disability or impairment and make accommodations based on the individual student's needs. Therefore, the focus is centred on the student's participation that results from the interaction between environmental and biological factors (Norwich, 2008^[6]).

Following its theorisation, the approach was deployed by the World Health Organisation (WHO) as the model to define disabilities in WHO's 2001 International Classification of Functioning, Disability and Health (ICF) and 2007 International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY). In fact, the ICF and ICF-CY conceptualise disability and functioning as a multidimensional interaction between health conditions, environmental factors and personal factors (Figure 1.1).

Figure 1.1. Interactions between components of ICF

Source: (WHO, 2007_[2]).

1.2. What are special education needs?

Definitions of special education needs and inclusive education policies have varied across time and space. Historically, the transition from a medical model of disability to more comprehensive biopsychosocial paradigms has shaped national and international understandings and definitions of disability. Today, countries still differ in the way they acknowledge and define SEN. To introduce the cross-country comparison carried out on this issue (Section 3.), the review presents a historical perspective on inclusive education and an operational definition of SEN that includes learning disabilities, physical impairments and mental disorders (OECD, 2019_[1]).

1.2.1. Students with SEN: from marginalisation towards inclusion

Until the second half of the twentieth century, disabilities were largely perceived as abnormalities, and individuals with disabilities and impairments were largely isolated and excluded from society and mainstream schooling. Starting in the 1970s and 1980s, parents and advocates who argued for the rights of children and people with disabilities started to gain a stronger voice in society and, with time, people with disabilities have been increasingly empowered across countries, although with great variation (Tropea, 1994_[7]).

Historical perspective on efforts to promote equity and inclusion for students with SEN

The 1978 Report of the Committee of Inquiry into the Education of Handicapped Children and Young People (hereinafter, the Warnock Report), chaired by Mary Warnock in the United Kingdom (UK), introduced the term *special education needs*. The Warnock Report aimed to gain distance from the diffused medical labelling of disability and impairment and transform the nature of education provision for students with disabilities and impairments, which was considered inequitable. The Report introduced the concept of SEN to define students in need of additional time or support in school, arguing that, at the time, about 20% of the student population had special education needs at least once during their learning (Warnock, 1978_[8]). Conditions leading to SEN presented in the Warnock Report included *speech and language disorders*, *emotional and behavioural disorder*,

visual disability and hearing disability, and different degrees of learning difficulties, *specific, mild, moderate and severe* (Ibid.).

In the following decades, the concepts of equity and, subsequently, inclusion became central in SEN policies across OECD countries. In education, equity implies that education systems should provide equal learning opportunities for all students, in line with Rawls' principle of equality of opportunity. Therefore, an equitable education system should ensure equality of learning opportunities for all students with SEN. Over time, the notion of inclusive education for students with SEN gained broader international consensus. In 1994, 92 countries signed the Salamanca Statement and Framework for Action on Special Needs Education. The document set the principle of inclusive education and recognised the need to work towards “schools for all – institutions which include everybody, celebrate differences, support learning and respond to individual needs” (UNESCO, 1994, p. III_[9]).

Several other international documents further promoted inclusive education for students with SEN. These include the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Guidelines for Inclusion: *Ensuring Access to Education for All* (2015) and the Convention on the Rights of Persons with Disabilities (2006). UNESCO defines inclusive education as “an on-going process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and the communities, eliminating all forms of discrimination and special education needs as disadvantages in physical, behavioural, intellectual, emotional and social capabilities” (UNESCO, 2008, p. 3_[10]). The OECD (2012_[11]) recognises that a student has special education needs when “he or she is not able to benefit from the school education made generally available for children of the same age without additional adaptations in the content of studies” (OECD, 2012, p. 1_[11]).

Where do we stand now? From school to the workplace: still significant gaps for students with SEN

Although there has been an increase in inclusive education policies and practices, enrolment and graduation gaps still remain significant between students with and without SEN in several countries. The gaps do not only concern education, but also employment and income attainments.

Across the United States (U.S.), for instance, achievement gaps between elementary students with an Individual Education Plan (IEP, usually provided to students assessed with SEN) and other students vary widely, from 9 to 51% (National Center on Educational Outcomes, 2015_[12]). Across states, on average, graduation rates between students with and without disabilities diverge by 20% (National Center on Educational Outcomes, 2019_[13]). In terms of enrolment gaps, less than 35% of students with disabilities who enrol in a four-year university degree graduate within eight years, and only 41% of students with disabilities who enrol in a two-year school graduate (Mader and Butrymowicz, 2017_[14]).

In the European Union, students with SEN are still less likely to obtain advanced academic certifications and qualifications, such as university degrees, and this consequently hinders their access to, and retention in, the labour market (European Commission, 2018_[15]). For example, in the UK in 2015-2016, 16-18 year-olds with disabilities were more likely to be neither in employment nor in education or training (NEET) than their peers, 13.2% vs 5.8%, with the highest difference between individuals with mental health disorders and those without any condition, precisely 20.3% vs 5.8% (Equality and Human Rights Commission, 2017_[16]). Between 2010-2011 and 2015-2016, there had also been significant differences in median hourly earnings for employees with and without disabilities. Median hourly

earnings for employees with disabilities decreased by 8.8% and those for employees without disabilities by 1.2%, with the highest decrease for employees with mental health disorders and vision impairments, 11.9% and 11.3% respectively. In 2015-2016, the gap in median hourly earnings was widest for those with learning disabilities (36.0%) whereas employees with disabilities assessed as progressive health conditions earned almost the same as employees without any condition (Ibid.). Fostering inclusive education for students with SEN becomes a priority when acknowledging the persistence of such gaps to ensure that all individuals can thrive in their lives from education to employment and to promote their well-being.

1.2.2. Operational definition: learning disabilities, physical impairments and mental health

Acknowledging significant differences in the recognition and definition of SEN across countries, the review proposes an operational definition needed to undertake the comparative analysis of policy approaches and practices on SEN and inclusive education.

Significant differences across countries in the recognition of SEN

Despite consensus on the importance of inclusive education and the rights of students with SEN at the international level, countries greatly differ in their understanding and recognition of SEN. National definitions of special education needs vary depending on whether - and the extent to which - countries provide condition-specific categorisations and labels of SEN and the different dimensions of special education needs included. Some countries, such as Austria and Norway, adopt a case-by-case approach, only providing a broad definition of special education needs (OECD, 2012_[11]), while others propose detailed clustering and listing of SEN, such as the U.S., which provides thirteen different categories of students with SEN eligible for special education (Annex A). Countries such as Portugal have more recently moved away from any categorisation of students, thereby abandoning condition-specific labels for students with SEN (Annex A).

National categorisations of SEN generally include conditions related to physical impairments, learning disabilities and mental disorders, with differences in the terminology employed to label similar conditions. Some countries recognise strong linguistic and/or cultural differences, giftedness, severe socio-economic disadvantages and immigrant backgrounds as categories of SEN (Ibid.). A number of countries also acknowledge other conditions leading to SEN, such as Greece, which recognises behavioural problems due to parental neglect, domestic violence and abandonment as conditions for SEN eligibility (European Commission, 2019_[17]).

An operational definition of SEN

The definition proposed for this review draws on common elements included in national definitions and considers three main areas of SEN: learning disabilities, physical impairments and mental disorders (OECD, 2019_[1]). The review will not cover gifted students, students with socio-economic disadvantages, or students with strong cultural and/or linguistic differences, as other areas of the OECD *Strength through Diversity* Project specifically address them.

The proposed list of special education needs included in the review consists of a non-exhaustive account of common conditions per SEN cluster and presents some of the main approaches that are available and in use to address each typology of SEN, although some countries may have different approaches and responses in place. Furthermore, it is

important to note that these policy responses are not wholesale and should be tailored to the needs of diverse students and educational contexts. Additionally, the review differentiates among commonly used typologies of SEN to the greatest extent possible despite acknowledging that many of the available country-level empirical studies and evidence often remain rather general when addressing conditions related to SEN. Finally, the review acknowledges that several countries provide inclusive schooling for students with SEN without using condition-specific labels. In this respect, the review has adopted the present operational definition and categorisation of SEN with the main aim of supporting cross-country comparison of existing policy approaches rather than promoting it as an overarching policy approach to be used across education systems.

It is important to consider that special education needs can result from multifactorial aetiologies¹ and can often be co-morbid, which means that individuals may have coexisting conditions leading to complex and diverse needs. For example, between 50% and 90% of children with ADHD have at least one comorbid condition, and approximately 50% of all children with ADHD have at least two (Canadian ADHD Resource Alliance (CADDRA), 2018_[18]). Co-morbidity can affect the intensity, degree and intersectionality of a student's special education needs. Also, a student can have a disability or impairment without necessarily requiring additional support in school.

Learning Disabilities

Learning disabilities (LD) are disorders that affect the acquisition, retention, understanding, processing or use of verbal and non-verbal information. Precisely, they might interfere with the acquisition or use of spoken or written language, mathematics and reading. They are neurological in nature and have a genetic component. The severity of symptoms varies greatly across individuals because condition-specific intensity differs in relation to co-morbidity. Learning disabilities are independent of intelligence: individuals with average or high performance in intelligence tests (such as IQ tests) can suffer from one or multiple learning disabilities and, as a result, may struggle to keep up with peers in school if left without support. The way in which LD are expressed can vary during an individual's lifetime. Some of the most common learning disabilities include dyslexia, dyscalculia and dysgraphia.

The review tries to make use of definitions of the most common learning disabilities provided by the 11th version of the International Classification of Diseases (ICD-11) of the WHO. The ICD-11 was adopted in May 2019 by the World Health Assembly with Resolution WHA 72.15 and will be implemented starting from 2022 (World Health Organization, 2019_[19]). Compared to previous ICD versions, ICD-11 generally presents more comprehensive and detailed definitions of learning disabilities.

¹ In the field of medicine, aetiology refers to the study of the causes of a disease or disorder (Cambridge Dictionary, n.d._[240]).

Table 1.2. Examples of learning disabilities

Common learning disabilities	ICD-11 definitions	Associated responses
Dyslexia (Developmental learning disorder with impairment in reading)	Significant and persistent difficulties in learning academic skills related to reading, such as word reading accuracy, reading fluency, and reading comprehension. The individual's performance in reading is markedly below what would be expected for chronological age and level of intellectual functioning and results in significant impairment in the individual's academic or occupational functioning.	A student with dyslexia can be given extra time to complete tasks, receive support at taking notes, and appropriately tailored assignments (often through alternative means of assessment or taped tests). Students can benefit from listening to books on tape and using text reading and word processing computer programmes (International Dyslexia Association, 2019 ^[20]).
Dyscalculia (Developmental learning disorder with impairment in mathematics)	Significant and persistent difficulties in learning academic skills related to mathematics or arithmetic, such as number sense, memorisation of number facts, accurate calculation, fluent calculation, and accurate mathematic reasoning. The individual's performance in mathematics or arithmetic is markedly below what would be expected for chronological or developmental age and level of intellectual functioning and results in significant impairment in the individual's academic or occupational functioning.	Among the various adjustments to support students with dyscalculia, concrete materials to support the linkage of mathematical symbols to quantity, extra time for assessments and practicing new concepts and reduced initial level of memorisation can be of help (About Dyscalculia, 2019 ^[21]).
Dysgraphia (Developmental learning disorder with impairment in written expression)	Significant and persistent difficulties in learning academic skills related to writing, such as spelling accuracy, grammar and punctuation accuracy, and organisation and coherence of ideas in writing. The individual's performance in written expression is markedly below what would be expected for chronological age and level of intellectual functioning and results in significant impairment in the individual's academic or occupational functioning.	Support in both handwriting and oral language skills to improve written expression, occupational therapy, and the use of a computer can support the learning of a student with dysgraphia (International Dyslexia Association, 2019 ^[20]).

Sources: About Dyscalculia (2019^[21]); CanChild (2019^[22]); International Dyslexia Association (2019^[20]); World Health Organization (2019^[19]).

Physical Impairments

Physical impairments affect the ability of individuals to access physical spaces (due to reduced mobility) or to access information that is delivered in specific ways: visual delivery (for visual impairments) and voice/sounds (for hearing impairments). In the case of hearing impairments, the production of information via sounds can also be compromised. The severity of symptoms can vary and technological/physical aids can ensure that individuals with such impairments are able to access learning in mainstream school settings (Table 1.3).

Physical impairments can either have hereditary components or be the result of specific diseases or traumatic events that produce long-lasting physical consequences. Without support, many students with physical impairments are at a risk of suffering not only from low levels of academic well-being but also of social, psychological and physical well-being. Depending on the specific form of impairment, individuals may need to acquire specific sets of skills that will enable them to access, retrieve and process information. Examples include sign language(s) and the braille system. Other impairments may require assistive technology, such as voice recognition software. The most common physical impairments are mobility, visual and hearing impairments (OECD, 2019^[1]).

Table 1.3. Examples of physical impairments

Common impairments	Definitions	Associated responses
Mobility impairments	Category of disability including people with various types of physical disabilities, such as upper or lower limb loss or disability, manual dexterity and disability in co-ordination with different organs of the body. It may be due to different factors, such as diseases, accidents and congenital disorders (World Health Organization, 2016 ^[23]).	Installing lifts and ramps to help students with physical impairments and ensuring accessibility to school transportation, facilities, classrooms and educational activities outside of the classroom (UK Government, 2019 ^[24]).
Visual impairments	Deficits in the ability of the person to perform vision-related activities of daily living, such as reading, orientation and mobility, and other tasks. Visual disability scores reflect the Burden of Vision Loss for the person, and should be assessed with both eyes open and with presenting correction, if any (World Health Organization, 2019 ^[19]).	Changes in the learning means employed and use of assistive technology (braille, large prints, audio, electronic texts, oral testing/scribing). Adapted learning and assessment materials, school and classroom accessibility (e.g. lighting, consistent placement of materials in the classroom), extra time for evaluations and assessments, and curriculum modifications (Teaching Students with Visual Impairments, 2019 ^[25]).
Hearing impairments	A person who is not able to hear as well as someone with normal hearing (hearing thresholds of 25 dB or better in both ears) is said to have hearing loss. This can be mild, moderate, severe, or profound, and congenital or acquired. It can affect one ear or both ears and leads to difficulty in hearing conversational speech or loud sounds. Individuals with hearing impairments often use sign language for communication (World Health Organization, 2019 ^[26]).	Sign language, voice recognition systems and assistive technology; provision of written material to support learning; encouraging self-placement of students with hearing impairments in the first rows of the classroom; class learning of sign language to foster integration (ADCET, 2019 ^[27]).

Sources: ADCET (2019^[27]); Teaching Students with Visual Impairments (2019^[25]); UK Government (2019^[24]); World Council of Optometry (2016^[28]); World Health Organization (2016^[23]); World Health Organization (2019^[19]); World Health Organization (2019^[26]).

Mental health

According to WHO statistics, 10-20% of children and adolescents experience mental health-related disorders worldwide; however, such conditions often remain largely unreported (World Health Organization, 2018^[29]). In recent years, there has been an increase in the attention to issues related to mental health in school and the impact that education systems can have on these problems.

Poor mental health can be both a consequence of lack of support for students experiencing disabilities and impairments and a distinct medical condition hampering students' academic progress and broader well-being. Because of the stigma associated with mental disorders and the fact that mental disorders affect the sense of agency that individuals have to seek for support, many students suffer from mental disorders that are long-standing and severely limiting. The experiences that children have in school can also be partially responsible for the onset of specific mental health disorders, for example, due to the experiencing of bullying, social isolation and stress.

The most common mental disorders affecting children in school include developmental disorders, such as attention deficit hyperactivity disorder (ADHD), attention deficit disorder (ADD), autism spectrum disorder and Tourette's syndrome, depressive disorders, anxiety, and disruptive, impulse-control and conduct disorder (oppositional defiant disorder [ODD, conduct disorder]), some of which are presented in Table 1.4.

Table 1.4. Examples of mental disorders

Common disorders	Definitions	Associated responses
Attention deficit hyperactivity disorder (ADHD)	Persistent pattern (at least six months) of inattention and/or hyperactivity-impulsivity, with onset during the developmental period, typically early to mid-childhood. The degree of inattention and hyperactivity-impulsivity is outside the limits of normal variation expected for age and level of intellectual functioning and significantly interferes with academic, occupational, or social functioning. The relative balance and the specific manifestations of inattentive and hyperactive-impulsive characteristics varies across individuals and may change over the course of development. In order for a diagnosis of disorder, the behaviour pattern must be clearly observable in more than one setting (World Health Organization, 2019 ^[19]).	There are multiple guidelines available to guide experts working in the field of ADHD. Many include classroom-led behavioural interventions (led by mainstream teachers with specific training), behaviour modification and cognitive behavioural modification techniques. Clinical guidelines for ADHD recommend including pharmacological stimulants and non-stimulants (ADHD Institute, 2019 ^[30]).
Anxiety	Generalised and persistent generalised anxiety disorder but not restricted to, or even strongly predominating in, any particular environmental circumstances. Diffused symptoms include persistent nervousness, trembling, muscular tensions, sweating, light-headedness, palpitations, dizziness, and epigastric discomfort. Fears that the individual will shortly become ill or have an accident are often expressed (World Health Organization, 2019 ^[31]).	Communication strategies to be adopted by teachers and co-designed with experts and students' counsellors/psychologists. Behavioural therapy, parent-child and family interventions, medications when necessary (International OCD Foundation, 2019 ^[32]).
Depressive disorders	Depression is a common mental disorder, characterised by persistent sadness, loss of interest and inability to carry out daily activities for at least two weeks. This can lead to loss of energy, alteration in appetite and sleeping habits, anxiety, restlessness, feelings of worthlessness, guilt, hopelessness, and thoughts of self-harm or suicide (World Health Organization, 2019 ^[31]). At school, depressive disorders often translate into frequent absenteeism, lack of participation, difficulties in concentrating or socialising, emotional disorders, weak academic performance, isolation, and impulsive and risky behaviour (Anxiety and Depression Association of America, 2019 ^[33]).	Supportive and cognitive-behavioural therapy, adaptations of curriculum to the student's particular needs and, when necessary, medication. Stimulation of in-class social interactions, teaching problem-solving and self-monitoring skills to students, increasing feedback on the student's academic, social and behavioural performance, and strengthening home-school communication and collaboration (Canada Ministry of Education, 2001 ^[34] ; South Australia Department of Education, 2019 ^[35]).

Sources: ADHD Institute (2019^[30]); Anxiety and Depression Association of America (2019^[33]); ADCET (2019^[27]); Canada Ministry of Education (2001^[34]); International OCD Foundation (2019^[32]); South Australia Department of Education (2019^[35]); World Health Organization (2019^[31]).

2. Empirical evidence on SEN policies, intersectionality and other emerging trends

Education policies for students with SEN can have considerable impacts on students' short- and long-term well-being, which must be acknowledged in all its dimensions, which include academic, social, psychological, physical and material outcomes. They also have overarching equity and inclusion outcomes at the system level and broader labour market, social, and societal outcomes (OECD, 2019^[1]).

Assessing the outcomes of SEN policies and practices on students' well-being becomes a priority when acknowledging the growing trends in identification of SEN in student populations and the increasing attention to dimensions of diversity found within them. Precisely, the various forms of induced diversity in education, such as special education needs, migration, ethnic groups, national minorities and Indigenous peoples, gender, gender identity and sexual orientation, and giftedness are increasingly considered in education policies, and their intersectionality should be taken into account to ensure that policies target the well-being of all students. Special education needs can intersect with any of the above-mentioned dimensions of diversity, and the responses to address students being identified with diverse needs should carefully examine these interlinks to ensure effective education provision for diverse student populations.

2.1. Addressing students' well-being through inclusive education policies

Inclusive education policies for students with SEN have effects on various dimensions of student well-being, not only in terms of students' academic achievements but also in how well they promote students' overall development and quality of life (OECD, 2019^[1]). International trends towards including students with SEN in mainstream settings have led to debates on the effects of inclusive education policies and practices (Ruijs, van der Veen and Peetsma, 2010^[36]). Despite indications that including students with SEN in mainstream education environments can support the overall well-being of students with and without SEN, the data and analyses available do not provide consistent and univocal conclusions (Limbach-Reich, 2015^[37]). Results greatly differ depending on the variety of SEN and outcomes being analysed (Ibid.). Additionally, mirroring the diversity of mainstream settings available for students with SEN across education systems (Section 3.4.1), analyses can focus on different typologies of mainstreaming and classroom strategies, thereby leading to diverse analysis focuses and outcomes. Given the variety of issues at stake, a word of caution against approximate generalisations is needed and the room for further empirical analyses on mainstreaming remains vast. The following sections provide an overview of some of the existing studies on the effects of mainstreaming on the academic, social and psychological well-being of students with and without SEN.

2.1.1. Promoting academic well-being of students with and without SEN

A variety of empirical studies on diverse student populations demonstrate positive academic outcomes of including students with SEN in mainstream settings. Some reviews report that students with SEN perform better in mainstream settings compared to students in special education (Hehir, Pascucci and Pascucci, 2016^[38]). For example, a study carried out in the Netherlands following the overlap of students with SEN in primary mainstream and special education settings induced by the *Weer Samen Naar School* (Back to School

Together Again) policy finds that students with a variety of SEN in mainstream settings tend to perform better in mathematics and languages than their peers in special education (Jepma, 2003^[39]). Positive academic benefits of including students with SEN in mainstream education settings are found across education levels, from preschool programmes (Justice et al., 2014^[40]) to upper secondary schools (Markussen, 2004^[41]), as well as when considering the achievement of formal qualifications and certificates (Myklebust, 2007^[42]). In their comprehensive review of international scientific literature on the effects of inclusive education, Ruijs and Peetsma (2009^[43]) find that most studies available show positive or neutral effects of mainstreaming students with SEN on their academic outcomes, with only a few reporting negative results. However, they point out that differences in the study designs and typologies of mainstream settings being assessed may influence the results available, thereby stressing the need to keep the design of these empirical studies in mind when drawing policy conclusions.

When it comes to the rest of the class, most of the evidence available reports neutral (Kalambouka et al., 2007^[44]) to positive effects of mainstreaming (Black-Hawkins, Florian and Rouse, 2007^[45]; Demeris, Childs and Jordan, 2007^[46]) students with SEN with students without SEN. Hence, enrolling students with SEN in inclusive education settings does not seem to outweigh any benefit that mainstreaming can have on students with and without SEN. The OECD (2003^[47]) illustrates that students may benefit from the inclusion of students with SEN since this commits teachers and educators to pay more attention to drafting curricula and learning programmes that can meet the needs of all students, thus improving teachers' overall skills to respond to diverse individual needs of students. Neutral effects of mainstreaming students with SEN could be due to the potential presence of differential effects among the rest of the students between lower and higher achiever groups (Ruijs and Peetsma, 2009^[43]). Very few studies have investigated these differential effects of inclusive education that seem to benefit low-achieving students without SEN in the classroom (Huber, Rosenfeld and Fiorello, 2001^[48]). When one group achieves a better academic performance and another group experiences worse outcomes, this results in a neutral average effect (Ruijs and Peetsma, 2009^[43]). Such differential effects between low- and high-achieving students without SEN could explain some of the neutral results obtained when investigating the effects of mainstreaming on students without SEN.

2.1.2. Promoting social and psychological well-being of students with and without SEN

There is evidence that the inclusion of students with SEN in mainstream settings also leads to positive social and psychological outcomes for students with and without SEN (Hehir, Pascucci and Pascucci, 2016^[38]). In general, students with SEN tend to show lower levels of social behaviour, namely, less pro-social and more negative social behaviour, compared to students without SEN (Schwab et al., 2015^[49]). They may also struggle to develop social relationships with their peers (Bossaert et al., 2015^[50]; Pijl, Frostad and Flem, 2008^[51]).

A study carried out in Ontario, Canada (Wiener and Tardif, 2004^[52]) examines the social and psychological well-being of students with learning disabilities in different schooling settings. Overall, students with SEN enrolled in mainstream settings perform better in terms of social acceptance, social skills, friendship ties, self-esteem, loneliness and depression. A review of academic literature on developmental disabilities further illustrates that

students with developmental disabilities² who enrol in mainstream education settings show higher levels of engaged behaviour than peers in special education (Katz and Miranda, 2002_[53]). In fact, there is evidence that an excess of special support provision could lead to stigmatisation and hinder potential progress (Keslair and McNally, 2009_[54]).

Some studies suggest that students with SEN are more likely to be negatively assessed by peers without SEN (Bakker and Bosman, 2003_[55]) and to be less active participants in subgroup interactions (Pijl, Frostad and Flem, 2008_[51]). Bakker et al. (2007_[56]) find that students with general learning disabilities are more often rejected and grow a lower self-esteem than peers with specific learning disabilities. To avoid low social integration and isolation of students with SEN and their families, mainstreaming could be more beneficial when there is a limited maximum number of students with SEN per class (Guralnick et al., 2008_[57]).

Mainstreaming does not seem to lead to any negative social outcome for students without SEN; rather, positive benefits for the short- and long-term growth of students without SEN can arise from it (Kalambouka et al., 2007_[44]). For example, by mainstreaming students with SEN, peers can develop positive ideas on inclusion, acceptance and tolerance (Helmstetter, Peck and Giangreco, 1994_[58]; Salend and Garrick Duhaney, 1999_[59]). In the long term, mainstreaming can help reduce prejudices among students without SEN (NESSE, 2012_[60]) and foster social cohesion.

2.2. Understanding SEN through an intersectional lens and other emerging trends

Recent trends have emerged regarding increased identification of special education needs in student populations and the intersectionality between special education needs and other dimensions of diversity found in education systems. This section introduces some of these interconnections, which represent the main domains of the OECD *Strength through Diversity* project: *Schooling for Inclusive Societies*. These include the overarching dimensions of socio-economic status and geographic location, as well as various forms of induced diversity: migration; ethnic groups; national minorities and Indigenous peoples; gender, gender identity and sexual orientation; and giftedness (OECD, 2019_[1]).

Without neglecting the perils of stereotyping when investigating intersectional trends in general manners, the following section does not aim at providing a comprehensive analysis of the intersectionality of different forms of induced diversity with special education needs; in fact, it aims at proposing an initial investigation of the complexity of the issue. Furthermore, the extent and degree of intersectionality of different forms of diversity with SEN are not only restricted to binary interrelations; rather, various forms can coexist and interact. For example, the intersectionality between SEN and migrant-induced diversity can be further investigated in terms of socio-economic conditions and gender to address even more heterogeneous dimensions of induced diversity. The scope for further research remains vast to more carefully explore the interrelations among different dimensions of diversity within education systems.

² The Government of British Columbia, Canada defines developmental disability as a “measured intellectual functioning of approximately 70 IQ or lower, with onset before age 18, and measured significant limitations in two or more adaptive skill areas” (Government of British Columbia, 2019_[237]).

2.2.1. Socio-economic condition, geographic location and SEN

Socio-economic status and geographic location are overarching dimensions that can influence the identification of special education needs in student populations and the delivery of responses to address them. For example, families from lower socio-economic conditions may not have enough resources to provide the full range of support their child needs. Geographic location could further compound delivery of services for students with SEN as students in small rural schools may not have access as readily available as students in big urban schools may have. These, among others, represent key issues for examining SEN with an intersectional lens.

Socio-economic status can influence the identification of SEN and service delivery

The ways in which special education needs and socio-economic condition can intersect are diverse and complex. Overall, socio-economic conditions can influence the identification of certain typologies of special education needs and response delivery of specialised support.

Traditionally, children from lower socio-economic conditions have been more likely to be identified as having special education needs and to be placed in special education (Kvande, Belsky and Wichstrøm, 2018^[61]). The disproportionality of placement of students from more vulnerable socio-economic conditions in special education raises questions of whether this is due to a significant influence of socio-economic conditions on a student's learning, emotional or behavioural difficulties or whether cultural biases have been major factors in determining the placement of students in special education.

Disadvantaged socio-economic conditions may impair learning abilities of children due to stresses linked to poverty such as lack of adequate childcare and financial distress (National Institutes of Health, 2012^[62]). However, the extent to which cultural biases play a role in determining the placement of a student in special education still remains uncertain (Kvande, Belsky and Wichstrøm, 2018^[61]). In fact, students from lower socio-economic backgrounds are more frequently identified with more subjective categories of disability and SEN (Schifter et al., 2019^[63]). The disproportionate identification of SEN and special education placement for students from lower socio-economic backgrounds is problematic because it can push teachers, educators and policymakers to disregard school- and system-wide biases that may have an impact on the higher rates of identification for special education among students from low socio-economic status (Schifter et al., 2019^[63]). The over-identification of SEN among students with more vulnerable socio-economic backgrounds and their over-placement in special education have significant implications on students' short- and long-term well-being as the separate classroom settings where students with SEN are often placed tend to have lower expectations and academic outcomes and higher stigmatisation (Ibid.).

Recent studies show that socio-economic conditions may increasingly intersect with special education needs in different ways. The link between socio-economic status and identification of special education needs appears to vary depending on the forms of SEN. The diagnosis of certain typologies of SEN, such as physical impairments and behavioural disorders, appears higher among students from more vulnerable socio-economic backgrounds, whereas other conditions, such as dyslexia, seem to be more likely detected in students from higher socio-economic status (Shaw et al., 2016^[64]). Further research in this field would be needed in order to assess the extent to which socio-economic differentials influence the identification of SEN and to investigate the other factors that may affect such trends.

Finally, socio-economic conditions also influence the delivery of specialised SEN support that a student may need. Families with insufficient resources may find more constraints to detect and provide adequate responses to address their child's SEN, especially outside of the classroom (Ibid.).

Geographic location can affect SEN identification and responses delivered

On top of socio-economic status, geographic location further influences the educational placement of students in special school settings. Together with socio-economic conditions and other contextual and cultural factors, geographic location plays a crucial role in determining school options available and school choice (Waitoller and Lubienski, 2019^[65]). It can also influence the degree and type of services available to support a student's SEN, as small rural settings may not have the same services in place that bigger urban schools may enjoy.

In rural settings there might be more limited specialised support available to address the variety of SEN that can be encountered in the student population, as well as more limitedness of external services to complement learning in school. Furthermore, fewer in-school non-instructional services requiring the presence of experts may be in place.

A different facet through which geographic location seems to intersect with special education needs concerns special education placement. Whether students are enrolled in more mainstream or special settings seem to be linked also to the geographic location where students live. For instance, evidence from the U.S. shows that levels of inclusion in mainstream schooling are higher in rural settings (Murry, 2018^[66]), whereas students with SEN in urban settings tend to spend less time in mainstream classes (Brock and Schaefer, 2015^[67]). This could be due to different reasons, such as higher community bonds and different cultural values (Murry, 2018^[66]).

A further dimension where geographic location can intersect with special education needs can be mainly found in countries with sub-national education systems. As previously mentioned in the review, in countries with different sub-national regulatory frameworks and eligibility criteria for SEN support, a student can be identified as having special education needs in one sub-national unit but not in another. Given possible sub-national differences in regulatory frameworks and responses in place to address students with SEN, specialised SEN support and responses may also vary depending on the sub-national unit where the student lives and attends school.

2.2.2. SEN, gender, gender identity and sexual orientation

Special education needs and gender-related issues appear to be rather interconnected. The identification and assessment of SEN show considerable discrepancies when taking into account dimensions related to gender, gender identity and sexual orientation.

Evidence shows that boys are more likely to receive a diagnosis of SEN compared to girls (Hibel, Farkas and Morgan, 2010^[68]; OECD, 2005^[69]). Such gender discrepancy is higher in non-normative typologies of SEN, such as ADHD, for which symptoms may differ between genders in pre-adolescence and adolescence years. Prevalence of ADHD is higher in males than in females, but following adolescence, both genders have similar characteristics (ADHD Institute, 2019^[70]). Instead, other conditions related to mental health in pre-adolescence and adolescence years such as depression disorders are more frequently detected in girls than in boys (Thapar et al., 2012^[71]). Furthermore, recent evidence from the U.S. shows that the prevalence of conditions related to mental health, such as depression

and anxiety, is seven times higher among transgender and/or gender nonconforming youths (Becerra-Culqui et al., 2018^[72]). In terms of sexual orientation, sexual minorities appear more likely to attempt suicide during their lifetime (Hottes et al., 2016^[73]) and homosexual and bisexual youths more likely to have higher risks of suffering from depression (Plöderl and Tremblay, 2015^[74]). There also seems to be significant differences in the risk of depression and social anxiety for homosexual and bisexual university students compared to their heterosexual peers (Cunningham, 2017^[75]).

As many conditions related to mental health develop during an individual's educational years, it becomes important to provide in-school and external support for students to prevent and address the conditions they may suffer from. Such a whole-school approach should be promoted to support not only students' academic outcomes, but their broader well-being.

2.2.3. SEN and migrant-induced diversity

The ways in which special education needs and migration-induced diversity intersect are different. First, evidence shows that some migrant and ethnic minority groups are often more likely to be diagnosed as having special education needs and placed in special education settings (Field, Kuczera and Pont, 2007^[76]). This may be due to language difficulties, culturally different attitudes or negative stereotyping (Donovan and Cross, 2002^[77]).

Second, mental health conditions are often acute among refugee and migrant students (OECD, 2019^[78]; WHO, 2018^[79]). To respond to these needs, several OECD countries have provided specialised services for immigrant students. Across Canada, many school boards have put in place specific counselling services for immigrant students to help them integrate in school and, when needed, to diagnose and address any SEN they may have (Education International, 2017^[80]). While early and well-timed identification of special education needs is important, in the case of migrant/refugee students the diagnosis of SEN may sometimes require some delay in order to get an accurate assessment of the child's learning needs and carefully take into account conditions related to trauma and linguistic and/or culturally different behavioural attitudes (Canadian Counselling and Psychotherapy Association, 2013^[81]). In this respect, the specialised counselling services for immigrant students in place across Canada aim at detecting and addressing special education needs acknowledging the difficulties of immigrant students arising from their migration experiences (Education International, 2017^[80]).

2.2.4. SEN and ethnic groups, national minorities and Indigenous peoples

The intersection between special education needs, ethnic groups, national minorities and Indigenous peoples is not only due to the fact that some countries identify strong ethnic and linguistic minorities as a category of special education needs, but is also linked to evidence showing that ethnic groups can often be over-identified with SEN.

Some countries include linguistic difficulties in their categorisations of special education needs. In Italy, for instance, a personalised learning plan is provided to students recognised as having special needs due to strong linguistic and/or cultural differences upon the judgment of school staff and/or social services (Italian Ministry of Education, 2018^[82]). The reasons why some countries may label linguistic minorities as having special education needs can be due to the effort to ensure that targeted and/or additional resources are appropriately allocated.

The OECD (2007_[76]) stresses that ethnic groups, national minorities and Indigenous peoples are often over-represented in special education settings. Federal statistics from the U.S. (2019_[83]) show that, in the academic year 2017-2018, the percentage of students aged 3 to 21 who received special education services, as well as the percentage distribution of different types of SEN, differed by ethnicity. American Indian/Alaska Native and Black students had the highest percentages of students served under the Individuals with Disabilities Education Act (IDEA), namely 18% and 16%. The percentage of students receiving special education services for learning disabilities was lower for Asian students, white students, and students of two or more races (each of which accounting for 30%) than for the overall students (on average 34%). The percentage of students identified with autism was higher for Asian students (23%), students with two or more races (11%) and white students (11%) than for the overall students (10%).

Similarly, recent research investigates the over-identification of SEN among different ethnicities in the UK (Strand and Lindsay, 2009_[84]). Students with Asian origins (namely Indian, Pakistani, and Bangladeshi) appear half as likely to be identified with autistic spectrum disorders as white British students; Black Caribbean and mixed white and Black Caribbean students appear twice as likely to be identified with social, emotional and mental health needs as white British peers (Strand and Lindroff, 2018_[85]).

Across European countries, Roma students are often over-represented in special schools and over-recognised as in need for specialised SEN support (Council of Europe and Commissioner for Human Rights, 2017_[86]). In the Slovak Republic, about half of the students enrolled in special classes are Roma students (OECD, 2019_[87]). The marginalisation of minority groups such as Roma hinders social integration and cohesion on top of having negative effects on students' educational outcomes (Council of Europe and Commissioner for Human Rights, 2017_[86]). In the long term, as a consequence of the over-identification of SEN among members belonging to ethnic groups, national minorities and Indigenous peoples, large numbers of youths can be excluded from the labour market and placed into powerless social positions (Strand and Lindroff, 2018_[85]).

2.2.5. SEN and giftedness

Special education needs and giftedness are not only interconnected because giftedness is included within the categorisation of SEN in several countries, such as Chile (Santiago et al., 2017_[88]) and Greece (Polyzopoulou et al., 2014_[89]), but also because gifted students are often likely to be identified as having a co-morbid condition leading to SEN. These students are generally labelled as being *gifted with a learning disability (GLD)*, *twice exceptional* or *double labelled*. Some of the most common special education needs identified in gifted students can be ADHD, Asperger's, physical impairments, socio-emotional disorders and dyslexia. For instance, evidence from different U.S. public government school districts shows that 14% of students identified as talented students appear to be also assessed as having another learning disability, compared to 4% of their peers (Rogers, 2011_[90]).

2.3. Other trends: increasing SEN acceptance, stigmatisation or competitive advantage from SEN diagnosis?

When analysing policy approaches to address students with SEN, wider societal discourses on SEN should be acknowledged. Among many, attention is often paid to societal levels of SEN acceptance and stigmatisation, as well as claims of over-identification of SEN led by rising competitive advantage. Most of these claims cannot be backed by evidence due to

the lack of comprehensive statistics on the issues; nonetheless, they should be acknowledged to provide a wider frame of the discourse on SEN across countries. Recognising this and the need for further research on the issues presented, the section provides an overview of current debates on SEN across OECD countries.

2.3.1. Increasing societal acceptance of SEN but still non-negligible stigmatisation

In several countries, there seems to have been an increase in the number of students identified with certain typologies of SEN, such as disorders related to mental health³. This could be due to various and diverse factors, such as increasing social acceptance of SEN and increasing openness towards recognising and addressing typologies of SEN such as mental health⁴.

In most countries, however, there is still a non-negligible degree of stigmatisation and marginalisation linked to diverse typologies of SEN. For instance, in the UK, children with SEN are two times more likely to be bullied regularly than their peers (Chatzitheochari, Parsons and Platt, 2014^[91]). In turn, social stigma can negatively influence SEN identification and responses. Additionally, in many countries, school-level responses to individual students' SEN can often be considered slow and bureaucratic (Gross, 2015^[92]). This can prevent students from receiving the support they need in a timely manner. These and other issues should be considered when assessing recent trends in the identification of SEN as contextual and societal factors could hinder responses at the individual and system level.

2.3.2. Recent claims of competitive advantage arising from SEN diagnosis

According to recent claims, some parents and students might find advantageous gains arising from receiving an assessment of SEN, as trends in parental lobbying for the identification of SEN could suggest (GL Assessment, 2017^[93]). Polls conducted on more than 800 teachers and principals across the UK show that some parents may be lobbying to have their children diagnosed with SEN to gain advantages in tests, exams or scholarships. More precisely, 57% of the teachers interviewed believe that there is a misdiagnosis of special education needs and around 40% of them consider that some parents may insist for their children to be identified with SEN often too quickly.

Despite the lack of evidence to back such claims further, they can be acknowledged with the awareness that country-specific factors play important roles in driving the current state of identification and acceptance of SEN across countries in different ways.

³ In the U.S., for instance, the number of children aged 6-17 identified with anxiety or depression disorders increased from 5.4% in 2003 to 8.4% in 2011–2012 (Center for Disease Control and Prevention, 2019^[239]).

⁴ In the U.S., there is increasing willingness among young adults to talk about mental health openly (American Psychological Association, 2019^[241]).

3. Policies and practices to address students with SEN: an OECD country perspective

This section builds on the design and implementation plan of the OECD *Strength through Diversity* project: *Schooling for Inclusive Societies* to present a framework for conducting cross-country analysis of SEN policies and practices. It covers five main policy approaches: I) the overall framework for governing diversity, equity, and inclusion for students with SEN, II) the use of resources to support students with SEN in education systems, III) capacity building for the main stakeholders involved in education systems, IV) school-level interventions and V) monitoring and evaluation of SEN policies. Each field of analysis presents diverse country approaches to capture a diverse range of policies and practices. The mapping provided in this section serves as a basis for investigating advantages and disadvantages of some of the main policy areas to promote inclusive education presented in Section 4.

Before mapping country policies and approaches to addressing students with SEN, it is important to take into account factors that challenge cross-country comparisons. Non-negligible differences in national and often sub-national definitions of special education needs imply that available country-level datasets are strictly dependent on how each education system defines them (OECD, 2012_[11]). Additionally, comprehensive education statistics on students with SEN are not always available at country level; this further hinders possibilities of carrying out solid and comparative quantitative cross-country comparisons.

3.1. Governance arrangements to support students with SEN

Different approaches to governing diversity, inclusion and equity for students with SEN can have a considerable impact on students' short- and long-term well-being. Overall, countries can have different governance arrangements in place that can result in differences in SEN policies and that can co-determine the effectiveness of system- and school-level approaches to inclusive education.

Examples of how countries address SEN via governance include setting educational goals for inclusion and equity for students with SEN and having more or less centralised and decentralised regulation frameworks. Other policy areas linked to governance arrangements include approaches to providing education to students with SEN and arranging their educational curricula. This section maps how these issues play out in different countries and governance contexts.

3.1.1. Overarching goals of inclusive education

Equity and inclusion are overarching principles that should guide all education policies across countries to ensure appropriate education provision for all groups of student populations. These principles are reflected in the Sustainable Development Goals (SDGs), the objectives of sustainable development set by the United Nations for 2030, which are at the core of international agendas. In particular, SDG 4 *Quality Education*, the Sustainable Development Goal focused on educational objectives, envisions inclusive education as a main outcome to be reached by 2030. Target 4.5 of SDG 4 explicitly tackles “equal access

to all levels of education for all, including for persons with disabilities” (United Nations, 2016^[94]).

At the national level, many countries have developed strategic plans for diversity, equity and inclusion in their education systems. In the specific field of SEN, goals range between short-term targets of including students with SEN in mainstream settings to longer-term goals of equity and inclusion that respect the diversity of individual students’ educational needs. One of the most recent examples of setting education goals for the inclusion of students with SEN comes from France. Starting from the 2019-20 academic year, France introduced a new plan, *Pour une école inclusive* (For an inclusive school), to address students’ SEN and assist their families quickly and effectively by establishing district- and school-level support services. Among the different policy objectives included, by 2022 the reform aims at fully covering the French national territory with the establishment of a quick response cell in every department to address each family’s request within a maximum delay of 24 hours (Government of France, 2019^[95]).

Several countries have established ministerial bodies and governmental agencies to support the objectives of equity and inclusion for students with SEN. Some examples are the Advisory Council on Special Education of Ontario’s Minister of Education, Canada (Ontario Ministry of Education, 2018^[96]) and the Special Education Section in Ireland (Ireland Ministry of Education, n.d.^[97]).

3.1.2. Regulatory frameworks

The OECD (2019^[98]) defines regulatory policy as policy related to achieving governmental objectives through the use of regulations, laws, and other instruments to deliver better economic and social outcomes. In this review, regulatory frameworks include national and international regulations on special education needs and inclusive education.

Various international treaties and documents assert the rights of students with SEN to inclusive education. All OECD member countries are signatories of the Salamanca Statement (Section 1.2.1) and the UN Convention on the Rights of Persons with Disabilities (CRPD), which came into force in 2008. All countries have national legislation and frameworks to regulate the inclusion of students with SEN in education systems.

Countries differ in terms of the degree of decentralisation⁵ of regulatory frameworks for providing education to students with SEN. Overall, federal states often have decentralised education systems with state- or provincial- level legislation on SEN. Examples of this are Canada and Germany, whose sub-national units have their own specific definitions of SEN and education systems in place. Non-federal countries usually tend to have national definitions of special education needs.

Definitions, in turn, vary depending on the extent to which countries provide condition-specific labels and classification of SEN. A number of countries, such as Finland (European Commission, 2019^[99]) and Sweden (National Agency for Special Needs Education and Schools, 2019^[100]), do not provide any legal definition of SEN. Many countries, however, include precise clustering of conditions in their definitions of special education needs and

⁵ Decentralisation is a term employed to describe the shift of responsibility and decision-making power to sub-national units and schools (Agency for Special Needs and Education, 2017^[184]). This involves changing the relationships between national and local authorities (schools, communities, teachers, parents and other local actors) in terms of decentralising responsibility and accountability for the management of education provision for students with SEN.

eligibility criteria for SEN support (see Annex A). Furthermore, countries differ in the way they define similar conditions. For instance, many countries employ the terminology of learning disability to define conditions such as dyslexia, whereas a few others such as the UK refer to specific learning difficulty (UK Department of Education and Department of Health and Social Care, 2015_[101]). While it is increasingly understood that the future of education may lie in identifying students with diverse combinations and intensities of needs rather than labelling students with SEN unidimensionally, the review acknowledges that many countries still employ condition-specific understanding and labelling of SEN. Given the comparative nature of the review mapping policy approaches in place, the cross-country analysis may, at times, still employ condition-specific lenses.

Countries do not only differ in terms of SEN definitions but also with respect to broader regulations related to individuals with SEN. For instance, there are over 45 countries around the world recognising sign languages as an official national language (Council of Canadians with Disabilities, 2019_[102]), about half of which are OECD member countries. Some systems, such as the Canadian provinces of Ontario, Alberta and Manitoba recognise American Sign Language as a minority language (Ibid.), whereas other countries such as Australia recognise sign language as a community language, but do not grant the provision of services in sign language (Australia Department of Employment Education and Training, 1991_[103]).

3.1.3. Making education curricula inclusive

Educational curricula are key tools for promoting policies of inclusive education and the rights of students with SEN. Countries have different curriculum policies in place that influence the way in which education is delivered to them. Examples of different curriculum policies include curriculum adaptations and modifications and alternative pedagogical curricula available in private or independent schools across countries.

Fostering inclusion through curriculum adaptations and modifications

Generally, most countries allow for curriculum adaptations and modifications to meet the individual learning needs of students with SEN and foster their inclusion (see Annex A). France, for example, provides different possibilities for curriculum adaptations depending on students' SEN. These range between individual support plans for students with health disorders, individual education plans for students with disabilities, personalised support schemes for students with learning impairments and personalised educational success programmes for students with temporary school difficulties (European Agency for Special Needs and Inclusive Education, 2016_[104]).

Curriculum policies for inclusive education do not only include curriculum adaptations to meet the individual needs of students with SEN, but also modifications in regular curricula to foster inclusion in mainstream classes. In Greece, mainstream schools can implement education programmes to strengthen knowledge and awareness of human rights, diversity, respect, dignity and inclusion to support the mainstreaming of students with SEN among students without SEN (European Agency for Special Needs and Inclusive Education, 2018_[105]). The teaching of similar citizenship values is included in Portugal's National Strategy for Citizenship Education to promote equality in interpersonal relations, the integration of difference and the respect of human rights (OECD, 2018_[106]).

In 2019, Ireland published the new Primary Language Curriculum, currently implemented to support primary school teaching and learning in English and Irish by describing the intended learning and development for all students. On top of providing Rationale, Aims,

Strands and Elements, and Learning Outcomes, this integrated curriculum equips teachers with a Primary Language Toolkit to support students' learning. The Primary Language Curriculum also includes seven sequential Special Education Needs pathways to present learning and development for students with SEN. Together with the Primary Language Toolkit, these SEN pathways are employed by teachers to recognise and support the learning of students with SEN while allowing them to progress at their own pace (National Council for Special Education, n.d.^[107]).

How alternative pedagogical approaches address students with SEN: interactive learning environments and special education rights

Across OECD countries, education systems address students with SEN through diverse pedagogical strategies. Examples of these are the Montessori Method and the Reggio Emilia Approach:

- The *Montessori Method* was specifically designed to address the needs of students with SEN, such as students with learning disabilities. It promotes an interactive learning environment, encourages movement and practical works, and accommodates socio-emotional disorders and learning disabilities by allowing students to draft most of their curriculum at their own learning pace and based on preferred activities. Montessori schools are traditionally independent/private schools that charge fees to attend. Therefore, any analysis of such pedagogy should acknowledge considerations about accessibility. There are around 20 000 Montessori schools in the world (North American Montessori Teachers' Association, 2019^[108]).
- The *Reggio Emilia Approach* refers to an education approach first implemented in municipal nursery schools and preschools of Reggio Emilia, in Northern Italy. The approach is based on pillars such as parental engagement, attention to the learning environment, the collegial work of all school personnel and atelier spaces where children can give space to their creativity and expressiveness (Reggio Children, 2019^[109]). Building on the UN Convention on the Rights of the Child, schools in Reggio Emilia drew on the concepts of children's rights to create a right-based approach of special education rights instead of special education needs. The Reggio Emilia Approach has become an educational philosophy based on the understanding of the student as having strong potential for development and as a subject of rights who learns and grows in relationships with others. In 2011, the Reggio Children Foundation was established to promote this educational approach around the world. Members of the foundation include the North American Reggio Emilia Alliance and the Government of South Australia (Reggio Children, 2019^[109]).

3.1.4. Education provision: enrolment options, school choice and offerings

The ways in which students with SEN are enrolled in education systems and the choices they and their families have to make when considering school selection and enrolment significantly shape the nature of SEN policies and practices across OECD countries.

One-track, two-track, multi-track and twin-track approaches

To analyse different approaches to providing education for students with SEN, the broad categorisation of one-track, two-track and multi-track approaches proposed by the

European Agency for Adapted and Inclusive Education (European Agency for Development in Special Needs Education, 2003^[110]) can be employed here (Table 3.1). By acknowledging both the fluidity of the three categories as potentially non-binary clusters and the limits of classification in evolving policy settings, countries can be classified based on the main enrolment approaches available for students with SEN:

- *One-track approach*: There are only a few specialised structures for students with SEN as mainstreaming is the most common practice. In mainstream schools, programmes are adapted to address individual students' SEN and supported by a diversity of services.
- *Two-track approach*: There is a high share of specialised structures, with two rather distinct education systems for students with and without SEN.
- *Three-track approach*: The system is a mix of the previous two, with a variety of approaches to inclusion. There could be specialised structures, specialised classrooms and mainstream classrooms.

Recently, countries such as Germany have started shifting from a two- to a multi-track approach, whereas other countries such as the UK (England), have increasingly committed to mainstreaming education for all, with the aim of shifting from a multi-track to a mainly one-track approach. It is important to acknowledge that within the cluster of the one-track approach, countries such as Italy enrol students with special education needs in mainstream classes, whereas others may tend to enrol students with SEN in specialised classes within mainstream schools.

Table 3.1. One-track, two-track and multi-track approaches

Approach	Characteristics	Examples of countries
One-track approach	There are only a few specialised structures for students with SEN as mainstreaming is the most common practice. In mainstream schools, programmes are adapted to address individual students' SEN and supported by a diversity of services.	Norway, Sweden, Italy, Greece, Portugal, Australia, U.S.
Two-track approach	There is a high share of specialised structures, with two rather distinct education systems for students with and without SEN.	Belgium, Germany (moving towards multi-track approach)
Multi-track approach	The system is a mix of the previous two, with a variety of approaches to inclusion. There could be specialised structures, specialised classrooms and mainstream classrooms	France, Austria, Ireland

Source: Readapted from Meijer, Soriano and Watkins (2003^[110]) and Mitchell (2005^[111]).

When considering approaches to education provision, it is important to underline that national education policies as well as the humanitarian and development education sectors have increasingly promoted a *twin-track approach* to special education needs. This entails ensuring that mainstream education approaches are inclusive of all students (included students with SEN) while also making sure that specific needs of students with SEN are targeted and met, such as through specialised teaching strategies (Humanity&Inclusion, n.d.^[112]; Inglad and Nilsson, 2012^[113]).

The impact of school choice and diversity of offerings

Countries not only differ in terms of educational approaches available for students with SEN, but also with respect to processes for selecting and choosing educational settings and learning strategies to address individual students' SEN.

In multi-track systems, the school choice between mainstreaming and special settings is generally shifted towards parents or guardians. This can have strong implications on how the student is included in the education system as students with similar conditions might be found enrolled in different settings (Annex A provides an extensive description of the different approaches taken by countries to provide education to students with SEN).

Further factors that might influence school choice and selection can be stratification, socio-economic conditions and geographic location as they could affect the range of choices and possibilities available for students with SEN and their families. For instance, rural or more deprived settings and lower socio-economic stratification can affect the availability of school choice and offerings that can adequately meet the diverse needs of students with SEN (Section 2.2.1).

3.2. Resourcing support for students with SEN

The ways in which financial resources are allocated for specialised SEN support provision play a crucial role in ensuring equal learning opportunities and inclusive education for students with SEN. This includes setting up criteria for funding resources for students with SEN as well as monitoring and evaluating the use of resources and ensuring that funds are used effectively (UNESCO, 2017_[114]). This section presents main trends in the general distribution of resources and suggests a classification framework for SEN funding models based on conditions for funding and direct resource destinations.

3.2.1. Governing SEN funding

Historically, funding for special education needs has often been managed separately from funding for general education to ensure the appropriate coverage of the needs of students with SEN (Sigafos et al., 2010_[115]). Across OECD countries, state-level funding for specialised SEN support is often under the responsibility of one or more ministries, typically the Ministries of Education, Health and/or Social Affairs. In Portugal, for instance, The National Early Childhood Intervention System (NECIS) is under the shared responsibility of the Education, Health and Labour, and Solidarity and Social Security Ministries. Local intervention units involve educators under the competence of the Ministry of Education, doctors, therapists and nurses via the Ministry of Health, and therapists and psychologists via the Ministry of Labour, Solidarity and Social Security. The Ministry of Education provides additional funds to finance partnerships between mainstream schools and resource centres for inclusion, which are centres to support the delivery of specialised SEN services in mainstream settings (European Agency for Special Needs and Inclusive Education, 2018_[116]).

Some countries have recently implemented reforms concerning financial schemes for specialised SEN support. For example, in 2014, Australia introduced the Schooling Resource Standard (SRS), a funding model for special education needs where loadings were based on a flat rate to respond to specific spheres of SEN. Since 2018, funding to support students with SEN has been based on the Nationally Consistent Collection of Data on School Students with Disability (Section 3.5.1). Supplementary, substantial and extensive support for students with SEN are funded with disability loadings, which instead

of being on a flat rate as they had previously been are now differentiated with different levels of funding based on the levels of adjustments students receive for their disability (Australia Government Department of Education, 2019_[117]).

3.2.2. Three main funding models

The section categorises commonly used funding mechanisms for students with SEN based on conditions for funding and direct resource destinations without aiming to provide a comprehensive and definitive classification of funding systems. It also acknowledges that some countries are currently revisiting their funding schemes, therefore the classifications presented are based on information available at the time this review was conducted. It is important that each resourcing scheme for students with SEN is carefully analysed in detail at national or sub-national levels (OECD, 2015_[118]) as every funding mechanism might have features belonging to other financing schemes, giving rise to different sets of advantages and disadvantages (Section 4.2).

Building on the classification framework proposed by the European Agency for Development in Special Needs Education (2016_[119]) and previously re-adapted by the OECD in an unpublished OECD working paper (Shewbridge, 2016_[120]), among OECD countries, funding models to address students with SEN can be generally classified along two main dimensions: funding recipients and conditions for funding (Table 3.2). The conditions for allocation of SEN funding to different actors vary between:

- *Input*: demand-driven model that puts emphasis on the demand for special education needs to be covered. Globally, it is the most common funding scheme to support students with SEN (UNICEF, 2012_[121]). Ministries generally allocate funds for students with SEN at the national level based on a flat grant, weighted-student formula or census of total student population per region/municipality. Countries with small percentages of students with SEN enrolled in special settings can have a need-based funding approach for special schools, such as Austria (European Agency for Development in Special Needs Education, 2016_[119]).
- *Throughput*: supply-driven model that emphasises specific services provided instead of needs to be covered. It usually determines the number of students eligible for funding and decentralises the allocation and management of funds at sub-central levels. Some countries that employ such schemes are Denmark, Ireland, Greece and Sweden (Ibid.). In turn, the allocation of funds from sub-central levels to school districts/individual schools can take different forms of financing schemes. In Sweden, for instance, there are differences across municipalities in terms of conditions for, and allocation of, funding. Models on which municipal funding formulae can be based include *input* schemes, when funding depends on the assessment of individual students' SEN, or *throughput* schemes, when it is based on school-level socio-economic conditions (Annex A).
- *Output*: model focusing on the results achieved (European Agency for Development in Special Needs Education, 2016_[119]). In the *output* scheme, funds channelled to mainstream and special settings are based on students' learning outcomes. Resourcing is dependent on reaching previously set outcomes and/or parameters. The *output* model represents the least common financing scheme across OECD countries.

Table 3.2. Funding mechanisms to support students with SEN

Conditions for funding	Recipients			
	Parents/ students	Mainstream schools	Local institutions/ Municipalities/Regional institutions	Special schools/ resource centres
Input (Demand-driven) E.g. Belgium, Austria, France, Netherlands	Client-based/ Backpack policies	<u>Flat grant/straight sum systems</u> : a fixed amount of funding per student with SEN. <u>Weighted systems</u> : different weight of funding assigned to each student depending on the nature of SEN. <u>Proxies</u> : funding is not based on the classification of individual students, but on other proximate factors at the school/district level.		
Throughput (Supply-driven) E.g. Sweden, Denmark, Ireland, Greece		<u>Census-based</u> : a fixed amount allocated based on the total number of students in the destination unit usually with certain weighted characteristics. E.g. socio-economic status and gender. <u>Resource-based</u> : the amount is allocated based on a calculation of resource needs according to the nature of students' SEN. <u>Cost-based</u> : direct reimbursement of certain types of costs incurred by the education of students with SEN (either full costs or a reduced percentage).		
Output		<u>Value-added</u> : based on demonstrated educational progress for students with SEN. <u>No value-added</u> : using a basic measure of observed educational outcomes.		E.g., referral rates to mainstream schools.

Source: Shewbridge (2016₍₁₂₀₎).

3.3. Developing capacity to address students with SEN

Developing the skills and competences necessary to address students with SEN in the classroom is important in order to foster inclusive education settings for students with and without SEN. Preparing teachers to address students with SEN in initial teacher education (ITE) and teacher practicum becomes central when acknowledging the increasing heterogeneity of student populations. In turn, providing continuous professional development on SEN is needed to ensure teachers' professional growth and foster inclusive education for students with SEN in current education settings. To do so, there should be sufficient awareness of the importance of developing inclusive education policies and approaches for students with SEN across countries. At the school level, not only the teaching body but also school principals and the rest of the school staff should be aware of the importance of addressing students with SEN through inclusive practices and should possess the competences to do so.

3.3.1. Building awareness of SEN: the role of Government and civil society organisations

Raising awareness of the benefits of promoting inclusive education for students with SEN is necessary to support an effective implementation of SEN policies and practices. This can happen at different levels, such as through initiatives led by governments and civil society organisations (CSOs).

Many OECD countries have units within their Education ministries/departments that are involved in raising awareness on inclusion and equity for students with SEN at the national level. For instance, in Belgium, the Inter-federal Centre for Equal Opportunities of Belgium (UNIA) is an independent public institution that works to address different grounds of discrimination, among which disability in various areas, such as in the workplace and in education. UNIA is often contacted by parents of students with disabilities who do not receive adequate in-school accommodations or who are enrolled in special education settings without prior comprehensive assessments. To respond to such discrimination, UNIA: I) provides advice and assistance to families and students with SEN, II) engages in advocacy and awareness-raising campaigns for inclusive education, which are co-designed and co-developed with and for people with disabilities, III) provides consulting for members of the education sector, local authorities and civil society and IV) issues studies and publications on SEN and inclusive education (UNIA, n.d._[122]).

Across OECD countries, non-governmental organisations (NGOs) also play important roles in raising awareness of SEN. In the UK, Mencap and Allfie are nationwide NGOs working to support inclusive education for students with SEN. Mencap focuses on learning disabilities and advocates for the inclusion of students with SEN in education through information campaigns. It also provides projects and services to support and foster the inclusion of students with learning disabilities inside and outside of the classroom (Mencap, n.d._[123]). Allfie is led by people with disabilities and aims at lobbying policy makers and competent authorities to ensure that inclusive education is effective for all by demanding legislation and policy change (Allfie, 2017_[124]).

Local NGOs also represent important bottom-up approaches to promote advocacy and awareness-raising campaigns. For instance, the Inclusion Campaign is a local NGO in New Jersey (U.S.) that is made of students, parents, other local non-for-profit organisations and actors that engage in campaigns to promote inclusive education for students with SEN in mainstream settings across the state and that support local and federal policies on inclusive education (The Inclusion Campaign, 2014_[125]).

Other initiatives such as the Council for Exceptional Children (CEC) are organisations led by teachers and educators to promote inclusive education for students with SEN. The CEC is a U.S.-based organisation that not only engages in awareness-raising and advocacy campaigns, but also provides professional development programmes for teachers. Furthermore, through its Youth and Advocacy Network, the CEC ensures the presence of spokespeople at state and federal levels to represent the rights and needs of students with SEN and inform education policies (Council for Exceptional Children, n.d._[126]).

3.3.2. Towards a more inclusive teaching force: hiring and retaining teachers with disabilities

Promoting teacher diversity is a key strategy for improving learning for students that share diverse backgrounds as well as for closing education gaps. This has increasingly been considered an important policy approach to work on in order to address the rich diversity found in the classroom not only in terms of special education needs, but also migration, ethnic groups, national minorities and Indigenous peoples, gender, gender identity and sexual orientation, and giftedness.

When considering the importance of promoting the inclusion and retention of teachers with disabilities or other conditions, the benefits can be manifold and diverse. Given the challenges teachers with disabilities may have faced and overcome in their educational and professional life, they can be important role models for students with SEN and for

modelling their self-determination (Ferri, Keefe and Gregg, 2001^[127]). Teachers with disabilities also appear to have strong advocacy and problem-solving skills (Brock et al., n.d.^[128]). Additionally, supporting the recruitment and retention of teachers with disabilities can not only be beneficial for the academic and overall well-being of students with SEN, but also to promote social cohesion and acceptance among the rest of the classroom.

Countries have non-discriminatory laws in place to support the inclusion of teachers with SEN in the teaching force. However, in many countries there still is a shortage of teachers with disabilities (Jeffress, 2018^[129]) and national statistics on employment and retention of teachers with disabilities are often scarce. A careful analysis of such a field therefore becomes rather challenging. Overall, on top of promoting the inclusion of teachers with disabilities to diversify the teaching body and make it more representative of student populations, it is also important to promote retention for this group of teachers. It is acknowledged that the inclusion of teachers with disabilities might involve additional costs due to accommodations that might be needed to support their work environment (National Union of Teachers, n.d.^[130]), but ensuring that teachers with disabilities are adequately supported to carry out their work becomes important in order to foster inclusion on both sides of the classroom. Additionally, to promote this, more inclusive terminology to identify teachers with disabilities and/or other conditions could be encouraged.

3.3.3. Preparing a diversity of teachers and school staff

Developing teachers and teaching assistants' capacity to address students with SEN represents a main policy area that can determine the effectiveness of inclusive education policies. As such, it should be promoted starting from initial teacher education (ITE) and continuing with teacher practicum, mentoring and professional development.

Including SEN in teacher education

Teacher preparation, which comprises both ITE and teacher practicum, is a crucial component that can determine the effective implementation of inclusive education for students with SEN. Some OECD countries, such as Denmark, include mandatory courses on SEN within ITE. Similarly, some German Länder require an academic course on SEN as a mandatory module to obtain a teacher degree (Franzkowiak, Hausotter and Merz-Atalik, 2010^[131]). In Spain, all teacher students must complete basic courses on special education and further specialisations are made available. For instance, following the 2013 Act on the Improvement of the Quality of Education (LOMCE), students of primary school teaching can specialise in special education and speech therapy with both theoretical and practical trainings (Government of Spain, 2013^[132]).

To become a teacher specialised in SEN, most OECD countries require either graduate studies in education with specialisation in special education or certifications on special education obtained by recognised institutions. For instance, in Greece, specialised teachers working in special, mainstream schools or in Diagnostic Assessment and Support Centres (KEDDYs) can have different educational backgrounds. They must hold a special or mainstream education degree with a focus on special education to be certified by post-graduate studies and trainings in school psychology or special education. Alternatively, they must have at least five years of experience in special education settings on top of holding a bachelor's degree (European Agency for Special Needs and Inclusive Education, 2018^[133]). In the UK (England), the National Scholarship Fund for Teachers provides financial subsidies for teachers to obtain post-graduate SEN diplomas either individually or in groups (UK Teaching Agency, 2013^[134]).

A variety of specialised support staff

Specialised support staff and teaching assistants are important human resources to ensure that the diverse needs of students with SEN are adequately addressed. They generally work in schools to support students with SEN either individually or in small groups under the supervision of standard teachers.

In the UK (England), individual local authorities and schools set the requirements for teaching assistants. Similarly, the requirements for teaching assistants vary across U.S. states, where they must generally hold a degree in education, assistant teaching or related subjects, and obtain the teaching assistant license required in each state (U.S. Department of Education, 2017_[135]). In Italy, teaching assistants must hold either the qualifications necessary to become teachers or a master's degree eligible for teacher tenders, together with obtaining a required number of academic credits in socio-pedagogical subjects. On top of the two options, a specialisation in teaching assistance is required (Chamber of Deputies (Italy), 2019_[136]).

When referring to the broad body of teaching assistants and support teachers, countries can have different categories in place. In New Zealand, there are various types of teacher resources to support the inclusion and learning of students with SEN in mainstream schools:

- *Learning and Behavioural Teachers* meet the needs of students with moderate learning disabilities/behavioural disorders.
- *Literacy Teachers* assist school staff to meet the needs of students with difficulties in reading and/or writing. Their support is not limited to students with SEN, but can cover the broader classroom as envisioned in the National Literacy and Numeracy Strategy.
- *Itinerant Teachers of the Deaf and Itinerant Resource Teachers of the Visually Impaired* are other teacher resources provided by the Ministry to meet the particular needs of students (New Zealand Ministry of Education, 2019_[137]).

3.3.4. Continuous professional development on SEN

Continuous professional development is an important tool in ensuring that practicing teachers can respond to students' individual needs and promoting inclusive education building upon the knowledge and skills acquired in initial teacher education programmes (OECD, 2019_[138]). This can take various forms, such as online training, workshops, seminars and self-study courses, and can be either mandatory or optional for teachers to attend. Continuous professional development is also key to promote skills among school leaders and school staff to address students with SEN.

Developing teachers' capacity through continuous development

Across OECD countries, there are numerous and diverse offerings of continuous professional development in SEN for mainstream teachers. In Italy, the Ministry of Education, University and Research (MIUR) co-designs in-service development training on inclusive education together with schools. Early risk identification, didactic measures to include students with SEN (with a dual intervention focus on students with and without SEN) and teaching guidance are among the topics included in compulsory professional development for mainstream teachers. Such training can also see the co-participation of other societal agents, such as local health authorities, universities and local organisations.

In addition, the MIUR put in place Territorial Support Centres (CTS), a network of schools providing teachers and schools with resources to promote the inclusion of students with SEN and support their learning. The CTS work on a peer-to-peer approach to share practices, support mainstream teachers and provide assistive technology (Italian Government, 2010^[139]; Italian Ministry of Education, University and Research, 2012^[140]; Italian Ministry of Education, University and Research, 2015^[141]).

To improve access to continuous professional development in SEN, in the UK (England) the government provides material on its online portals. It consists of five specialist modules: I) autism spectrum disorders, II) dyslexia/specific learning difficulties, III) speech, language and communication difficulties, IV) behavioural, emotional and social difficulties, and V) moderate learning difficulties⁶. The online portal includes a resource library for teaching students with SEN in mainstream settings and a set of training materials on more complex and severe SEN (UK Department for Education, 2014^[142]). In France, a recent reform on special teacher trainings in primary and secondary schools has been implemented to promote the role of specialised teachers as resources for mainstream teachers (European Agency for Special Needs and Inclusive Education, 2017^[143]).

Developing school leaders and school staff capacity

School principals play a crucial role in preparing schools to address students with SEN. School leaders can enhance co-operation and the sharing of skills and practices among teachers to promote inclusive education (OECD, 2018^[144]). Principal leadership also appears to be particularly important to stimulate teachers to develop new teaching practices and attend continuous professional development on SEN. In this respect, in Italy, in-service training on SEN is not only mandatory for teachers but also for school principals and the rest of the school personnel. Similarly, in Chile, mainstream schools with a school integration programme (Programa d'Integración Escolar, PIE), necessary for schools to enrol students with SEN, receive funds to be channelled in resources to address students with SEN, including professional development programmes for all school staff (Chile Ministry of Education, 2016^[145]).

3.4. In practice: school-level interventions to support students with SEN

School-level interventions are important policy areas to promote inclusive education settings for students with and without SEN (OECD, 2019^[1]). Main school-level interventions refer to the distribution of financial and human resources to support students with SEN, learning strategies, the use of assistive technology, and engagement of families and the local community.

Overall, students with SEN can be enrolled in different typologies of classes within and outside mainstream school settings. They can receive one-to-one or small-group instruction, with the additional support of assistive technology when necessary. Schools can also provide additional services, such as counselling and therapy, to respond to diverse needs of students and promote their broader well-being. Schools can provide these services through partnerships with community-based services and networks of specialised centres to support the inclusion of students with SEN in schools.

⁶ In the UK (England), the term “learning difficulty” is employed to describe the array of conditions that, for operational reasons, the *Strength through Diversity* project classifies as learning disabilities.

3.4.1. Learning strategies

Across OECD countries, students with SEN can be enrolled in different types of classes inside and outside of mainstream settings, and their support can be delivered in the forms of individualised or small group-based learning. Different strategies can be more or less suitable depending on students' specific needs.

Different types of classes tailored for diverse students' needs

The Government of Ontario (Canada) provides a comprehensive range of diverse classrooms available for students with SEN. These different options mirror the main typologies of classes available for students with SEN across OECD countries. Therefore, the review provides a categorisation of different classes available for students with SEN based on the example of Ontario. Aside from special school settings, students can be included in mainstream schools in different class settings. They can take the form of:

- *Integrated classes* in which students with SEN are mainstreamed full time.
- *Withdrawal classes* are periodical school settings that students with SEN attend outside of their mainstream class.
- *Mainstream classes with teaching assistance* are classes in which students with SEN receive part-time support.
- *Mainstream classes with indirect teaching support* are settings in which mainstream teaching staff and bodies implement their standard teaching approaches but tailor them to meet the students' needs (Our Kids, 2019^[146]; Toronto District School Board, 2017^[147]).

The different typologies of classroom strategies have a direct impact on the learning and inclusion of students with SEN. They can have various advantages and disadvantages and can be more or less suitable depending on the diverse types and degrees of SEN (Section 4.4.1).

One-to-one and small group tuition

Two main approaches to providing specialised teaching and support assistance to students with SEN can be identified: one-to-one tuition and small group interventions. One-to-one instruction involves intensive individual education provision supported by a specialised teacher or a teaching assistant inside or outside of mainstream classes. In small-group interventions, learning and teaching occur in small groups where a specialised teacher or teaching assistant follows a small number of students with SEN. In Japan, for instance, lowest-need students are supported through small-group instruction in mainstream settings, and students with moderate SEN can be supported either individually or in small teams in resource rooms in mainstream settings (Annex A). Overall, both one-to-one and small-group approaches have advantages and disadvantages to be considered when designing and implementing school-level interventions (Section 4.4.2).

Across Australian states and territories, for example, education for students with SEN can be provided in special classes with lower student/teacher ratios within mainstream schools. In Greece, students with SEN must be enrolled in different classes of the same grade to avoid having more than one student with SEN in the same class. In the country in general, the number of students with SEN enrolled in the same mainstream class cannot exceed four. If this is not possible and the school does not have a specialised class available within

mainstream settings, the total number of students enrolled in the class should be reduced by three (European Agency for Special Needs and Inclusive Education, 2018_[148]).

Supporting inclusion through assistive technology

It is widely recognised that assistive technology (AT) can help support the inclusion of individuals with SEN and disabilities in various domains of life (UNESCO, 2010_[149]). In education, AT can serve as an important means for students with SEN to access and receive inclusive and equitable education. The need for AT is usually assessed when designing students' individual education plans.

Empirical evidence shows that AT helps overcome significant learning barriers posed by learning disabilities, such as dyslexia and dysgraphia (Couteret, 2009_[150]). Some of the tools available to support students with dysgraphia range between low-tech AT, such as adapted pencils, papers and graphic organisers, to word processing software. For students with dyslexia, audiobooks, reading trackers, enlarged texts and special fonts represent useful AT tools.

In Portugal, a network of Information and Communication Technology Resource Centres for Special Education supports schools and assesses the needs of students with SEN for assistive technology. The centres provide services to students with SEN, ensuring access to digital learning and supportive resources. They train teachers and students in the use of ICT and AT and raise awareness on the beneficial use of AT for students with SEN (Liebowitz et al., 2018_[151]). These centres work rather similarly to Italian Territorial Support Centres (Section 3.3.4).

Assistive technology is not only beneficial in supporting the learning of students with SEN, but also in increasing teacher awareness of students with SEN's cognitive experiences and improving the overall quality of teaching. For example, evidence shows that experiencing various types of simulated dyslexia with virtual reality fosters teacher awareness of the cognitive experiences of students with dyslexia (Passig, 2011_[152]) as it allows teachers to better empathise with students and understand the needs arising from dyslexia, therefore promoting quality education for students with SEN.

Box 3.1. Social Robots for students with Autism Spectrum Disorders (ASD)

There has been an increasing interest in the potential of social robots to support the learning of students with a diversity of special education needs, including students with Autism Spectrum Disorders. A variety of humanoid AI robots (e.g. Milo, Kaspar, Nao) have been designed to interact with students on the autism spectrum to help them promote, among others, their social and communication skills.

These ad-hoc social robots seem to increase the capability of students with ASD to self-regulate their emotions and attention span and decrease social anxiety. In particular, some of the potentials of social robots lie in the fact that they can be highly adaptive to individual students' needs, educational objectives and personal characteristics. At the same time, these machines can support teachers and families in following the students' learning, development and growth.

As the growth pace of new technology has been faster than research in the field, the efficacy of social robots for students with ASD still needs to be further investigated. While preliminary findings show rather positive impacts of social robots on the educational and social life of students on the autism spectrum,

significant challenges remain, such as high costs, teacher training and social acceptance of robot usage.

Sources: (Weir, 2018_[153]; Hooft Graafland, 2018_[154]; Alcorn et al., 2019_[155]).

3.4.2. Promoting non-instructional services as a whole-school approach

Services available at the school level are important tools for fostering the inclusion of students with SEN inside and outside of school. In Italy, for instance, each university has a Rector's Delegate for Disabilities and Learning Disabilities that co-ordinates university-level measures to promote the inclusion of students with SEN and remove barriers to their learning (Italian Government, 1999_[156]; Italian Government, 2010_[139]). Across OECD countries, other in-school services available across education levels include counselling and therapeutic services to address the diverse needs of students, as well as specialised career and educational guidance to guide students with SEN's educational and professional choices.

Counselling and therapeutic services

Several OECD countries provide different school-level services to support the inclusion and learning of students with SEN. For example, in the U.S., schools offer counselling services with experts trained in learning disabilities and mental health disorders. School counsellors can help parents by providing recommendations, support and supervision of specific programmes for students with SEN. Most school counsellors offer families referrals since they are not in the position to provide diagnoses or prescribe medication for students with mental health disorders (American School Counselor Association, 2016_[157]). Similarly, most Canadian territories have a comprehensive school counselling system in place that is important for detecting mental health disorders and assisting students with SEN through guidance and mentorship (Canadian Counselling and Psychotherapy Association, 2019_[158]). Furthermore, Canadian in-school counselling services have been important resources to help refugee students integrate and adapt to the Canadian schooling setting. Refugee students often display poor mental health or post-traumatic stress due to their migration journeys, which can further intersect with other special education needs (Cerna, 2019_[159]).

On top of counsellors, some OECD countries such as Finland have other specialised staff such as psychologists, doctors and therapists working in schools. New Zealand offers occupational therapy and physiotherapy for students with moderate disabilities who do not meet Ongoing Resourcing Scheme (ORS) criteria covering areas of needed support due to hearing, visual or physical impairments, or difficulties in learning, language use or communication (New Zealand Ministry of Education, 2019_[137]).

Career and education guidance

Generally, students with SEN tend to have higher dropout rates from school than their peers (European Agency for Special Needs and Inclusive Education, 2016_[160]; U.S. Department of Education, 2014_[161]). Furthermore, individuals with disabilities are more likely to be unemployed compared to individuals without disabilities, as reflected in national statistics

such as the U.S. July 2019 Disability Employment Statistics⁷. Income gaps appear to be significant as well, as shown for instance by evidence on people with mental health-related issues (Luciano and Meara, 2014_[162]) as previously mentioned (Section 1.2.1).

Career and educational guidance can become important tools to help address and reduce graduation, employment and income gaps for students with SEN. In some education systems, Special Education Needs Co-ordinators (SENCOs) are school-level staff members responsible for co-ordinating the provision of services and support to students with SEN. They also serve as important intermediaries among different schools, as well as between the school, the community and families. Furthermore, SENCOs can play important roles in providing education and career guidance (Cowne, 2013_[163]).

Supporting transitions between education levels and to the labour market

Students with SEN still face non-negligible challenges concerning the transition to university and tertiary education and to the labour market, with consistent enrolment, graduation and employment gaps found across countries (Section 1.2.1). Diverse factors drive such exclusion. Among them, poor-quality support and transition strategies can contribute to the exclusion of young adults with disabilities from the labour market (Ebersold, 2012_[164]). Therefore, having robust transition planning in place is an important policy approach for promoting the inclusion of students with SEN in higher education levels and in the labour market. National transition planning implemented at school, municipal or district levels is another strategy used to support the transition of students with SEN from school to employment (Ibid.).

In Ireland, the National Council for Special Education (NCSE) provides guidelines for schools and parents to support the transition of students between different education levels and from school to post-school options. For instance, the transition from primary to post-primary school can be eased through pre-transition visits, ongoing support during and after transition by specialised school staff, and transition booklets adapted for students and their families. Transition to post-school options begins two years before the student leaves school, with support and human resources available to assist and guide the student in post-school decisions (National Council for Special Education, 2016_[165]).

In the UK (England), there are various national transitional planning programmes in place for students with SEN, such as Preparing for Adulthood (PFA). The Department of Education finances the PFA programme and provides knowledge and expertise at local, national and governmental levels to support the transition of students with SEN into paid employment and independent living, as well as to foster inclusion in society by supporting local authorities and community services (Conlon, 2014_[166]).

3.4.3. Strengthening multilateral co-operation: engaging families and local communities

School co-ordination and co-operation with parents, families and the local community is crucial to fully address and meet the diverse special education needs that students may have. The development of skills and strategies to support partnerships between schools and

⁷ US Disability Employment Statistics shows that labour force participation of people with disabilities is 20.8%, whereas that of people without disabilities is over 69%. The unemployment rate of people with disabilities exceeds 7%, whereas that of people without disabilities is lower than 4% (U.S. Department of Labor, 2019_[235]).

families can be included in initial teacher education and continuous professional development for teachers and school personnel, principal preparation programmes, and community-building initiatives (Barlow and Humphrey, 2012_[167]).

Supporting collaboration between the school and parents

Most countries have regulations concerning the role of parental involvement in education choices for students with SEN, such as participating in drafting the student's individual education plan and selecting the most appropriate school setting for their child. In countries such as Denmark and Sweden, schools actively collaborate with parents by providing them training and guidance and engaging them as active stakeholders who exchange information and suggestions.

Mitchell (2010_[168]) identifies five different degrees of parental involvement in decision making and activities to address their children's SEN. They vary from informing parents about decisions related to their child's education to actively including them in the decision-making process. Some approaches through which partnerships between parents and schools can be strengthened include enhancing communication and collaboration, involving parents in school volunteer opportunities, home learning activities, and assisting them in consolidating their child-raising skills (Barlow and Humphrey, 2012_[167]).

In the UK (England), the nation-wide Early Support programme promotes co-operation with parents and guardians in early education to ensure that the families of students with SEN are active decision-makers in choices concerning their children's educational development. This collaboration takes place through "Team Around the Child" (TAC) meetings. Other programmes such as "Aiming High for Disabled Children" work with the similar purpose of including parents/guardians by fostering practice-sharing, delivering training and including parents in management committees (Children's Workforce Development Council, 2013_[169]).

Supporting collaboration between the school and the local community

Community-level services can complement school services provided for students with SEN. This can ensure that the needs of students with SEN are fully met inside and outside of the classroom and that a whole-school approach is promoted.

In the U.S., the local community usually offers additional services beyond school capacity through a multi-tiered system of support (MTSS). The MTSS allows community-based services to serve as complementary and well co-ordinated supports to school-based learning. For instance, the co-ordination and collaboration among schools, parents and community is supported by the Federation of Students with Special Education Needs. Among many services offered, the organisation provides a phone number that parents of students with SEN can contact to learn about the different services locally available for their children (Federation of Students with Special Education Needs, 2019_[170]).

3.5. Monitoring and evaluation of SEN policies

Inclusive education policy monitoring and evaluation is crucial in determining whether education systems meet inclusive education goals set at local, national or international levels. These processes are important tools that can help enhance student outcomes and drive continuous development in the delivery of education services (OECD, 2018_[144]). This goes beyond evaluating and monitoring students' learning alone; it also refers to the

processes of data collection and assessment of systems, programmes, materials, resources and processes.

3.5.1. Lacking comprehensive national and international statistics on SEN

There are no internationally comparable datasets on students with SEN for OECD countries. This is unsurprising considering that countries do not share common operational definitions of SEN. As a result, country-level data is collected according to national definitions of SEN (Section 1.2.1).

There are some cross-country datasets related to SEN at the European level. The European Agency for Special Needs and Inclusive Education provides statistics on populations of students with SEN and school enrolment, students with an official diagnosis of SEN (meaning students who have received a SEN assessment by an expert) disaggregated by gender and age. The Agency collects data every two years for 31 European countries. To better account for national differences in SEN definitions and education systems, countries provide qualitative information to complement their statistics on SEN, such as national definitions of SEN and the role of private education provision for students with SEN (European Agency for Special Needs and Inclusive Education, 2018^[171]).

At the national level, countries differ in terms of national data collections on students with SEN. While some countries have broader and less comprehensive statistics available, other countries such as the U.S. and the UK have more structured data collections. The two countries share similar statistics on students with SEN, providing data on enrolment, graduation, absence, exclusion and characteristics of students with SEN (UK Department of Education, 2018^[172]; U.S. Department of Education, 2019^[173]). In addition, the U.S. offers data collections about the intersectionality of special education needs with other forms of induced diversity in student populations, such as gender and ethnic groups. In Australia, the Nationally Consistent Collection of Data on School Students with Disability (NCCD) collects data on students who receive specialised SEN support in school, which is ranked in four degrees: quality-differentiated teaching practice and supplementary, substantial and extensive support (Australia Education Council, 2019^[174]). This data collection is not only used to monitor and evaluate the systems in place but also to provide funding for students with disabilities in the country (Annex A).

3.5.2. Promoting efforts to implement monitoring and evaluation systems

Some countries are increasingly developing monitoring and evaluation systems of SEN policies. For instance, Australia's NCCD (mentioned above) is employed to monitor and evaluate the provision of educational and support services to students with SEN across sub-national units and to provide funding for SEN services in the country.

A structured example of monitoring and evaluation systems of SEN support comes from the U.S. In 2014, the U.S. introduced Results-Driven Accountability (RDA), which modified state-level evaluation and assessment of state-level special education programmes aiming at improving students' educational outcomes. The RDA is composed of three main components:

- *State Performance Plan/Annual Performance Report*, which measures results and compliance. In tandem, each state develops a *State Systemic Improvement Plan* (SSIP), using data to identify gaps in outcomes for students with SEN and implementing evidence-based reforms to address the identified gaps (U.S. Department of Education, 2014^[175]).

- *Determinations* reflecting a state's performance in results and compliance.
- *Differentiated Monitoring and Support* for all states, with a focus on low-performing states.

The RDA framework is currently under revision by the U.S. Office of Special Education and Rehabilitative Services (OSERS) in order to improve early childhood, educational and employment outcomes for people with disabilities, their families and communities (U.S. Department of Education, 2018^[176]).

4. Investigating advantages and disadvantages of different policy approaches

Building on the mapping of country policies and approaches proposed in Section 3. , this section investigates the advantages and disadvantages of various policy approaches to the provision of education to students with SEN: governance arrangements, distribution of resources and resourcing schemes, capacity building, school-level interventions, and policy monitoring and evaluation. Each policy approach analysed in the review has particular advantages and disadvantages. These should be considered together with other contextual factors when designing and implementing policies to support the inclusion of students with SEN in education systems.

This section focuses on some of the most commonly discussed SEN policy areas in national and international arenas. These include benefits and challenges of labelling SEN, decentralising regulatory frameworks, and implementing two-track approaches to provide education to students with SEN. Section 4 also explores advantages and disadvantages of different funding schemes as well as of various policies and approaches for developing capacity-building strategies and school-level interventions.

4.1. Governance arrangements

In addition to fostering co-ordination and collaboration among the stakeholders involved in policymaking and policy implementation at national and local levels, setting goals and guidelines is central to promoting effective education policies (OECD, 2018^[177]). In this respect, the processes of defining and labelling special education needs, as well as the degree of decentralisation of regulatory frameworks, represents important policy areas that can shape the overall system of educational provision for students with SEN.

How countries define special education needs, as well as eligibility criteria for specialised or adapted provision, has a direct impact on the design of policy approaches for governing the inclusion of students with SEN, as well as on the effectiveness of such policies. In particular, national and sub-national definitions of special education needs, and the choice of labelling SEN, influence the design of regulatory frameworks concerning the provision of education to students with SEN. In turn, more or less decentralised regulatory frameworks for SEN have an impact on other inclusive education policy areas.

4.1.1. Defining and labelling special education needs

The ways in which special education needs are defined can have considerable impacts on country policies to support students with SEN, as well as on international comparisons of SEN statistics and policy trends. Therefore, when designing inclusive education environments for students with SEN, considerations about the impact of different definitions, both within and across countries, should be taken into account. Labelling SEN can also have an impact on the way SEN policies are designed and developed, as well as on student well-being outcomes.

Approaches to defining special education needs

In-country differences in defining and acknowledging special education needs can mean that students may not receive the same support and treatment across different sub-national units. In particular, a lack of common sub-national definitions might lead to having students

identified with SEN in one region/province/state who are not eligible for SEN support in another sub-national entity.

In Canada, for example, there is significant variability in definitions of special education needs across provinces and territories (D’Intino, 2017^[178]). In particular, the provinces of Ontario, Quebec, Prince Edward Island and Manitoba, and the Northwest Territories have rather unique definitions of learning disabilities (Kozey and Siegel, 2008^[179]). For instance, Quebec employs a non-categorical definition of special education needs, collectively classifying students with SEN as “at-risk”, whereas Ontario’s definition of SEN includes precise categorisations of special education needs (Ibid.). In the U.S., federal legislation requires states to set the eligibility criteria for learning disabilities (U.S. Government Accountability Office, 2019^[180]). States also have some degree of flexibility in defining broader disabilities and impairments as long as state-level definitions do not exclude students that the federal IDEA definition would cover (Ibid.).

Different ways of defining special education needs have a strong direct impact on the education provision for students with SEN. For instance, with the 2012 “Inclusion Act”, Denmark restricted the understanding of special education needs to cover those needs that require assistance for nine or more hours per week. The country no longer identifies other needs as SEN but rather as *supplementary education*, which is under the responsibility of a classroom’s head teacher. This change in regulation was implemented to decrease the number of students enrolled in special education settings and to promote inclusive education (Egelund and Dyssegaard, 2019^[181]).

Labelling students with SEN

Labelling special education needs can have both positive and negative impacts on students’ academic and socio-emotional outcomes (Table 4.1). The advantages of labelling a student as having SEN include promoting the channelling of resources and specialised support, such as individual education plans, adapted curricula and teaching assistance. However, at the same time, labelling students as having particular SEN can reduce the academic expectations that students, parents and/or teachers may set, as well as students’ socio-emotional outcomes. This could increase risks of stigmatising students with SEN, lowering their levels of self-esteem and discouraging socialisation with peers (Higgins et al., 2006^[182]).

To counter the disadvantages of labelling students with condition-specific SEN, different interventions can be put in place inside and outside of the classroom. For example, the approach taken by Finland shows that labels could be employed for administrative purposes while not being used in schools. More precisely, the Finnish system does not require an expert assessment to decide whether a student may have learning disabilities, and diagnostic labels are not used in schools. However, disability labels are still used for students with physical impairments and other conditions, but only at the administrative level (Itkonen and Jahnukainen, 2010^[183]).

Other types of interventions can help minimise the disadvantages of labelling. Teachers could address the risks of stigmatising students labelled as having SEN by fostering an inclusive and tolerant class environment, without lowering expectations for students with SEN and offering them positive encouragement (Ibid.). If necessary, teachers should set different or adjusted expectations for individual students; these should be ambitious and realistic. An example of such strategies are Ireland’s sequential Special Education Needs Pathways provided to guide teachers in recognising and supporting the incremental learning and progress of students with SEN (Section 3.1.3). Additionally, promoting

inclusive classrooms for students with SEN within the rest of the class can also help counter negative effects of labelling (Section 3.1.3).

Table 4.1. Advantages and disadvantages of approaches to defining and labelling SEN

	Advantages	Disadvantages
Defining SEN		
<ul style="list-style-type: none"> At the international level 	<ul style="list-style-type: none"> Country-level definitions of SEN give countries the autonomy to define SEN in a way that reflects national context/needs. 	<ul style="list-style-type: none"> Can hinder cross-country comparisons on SEN statistics and policy trends.
<ul style="list-style-type: none"> Within a country 	<ul style="list-style-type: none"> Sub-national definitions of SEN can give sub-national units the autonomy to define SEN in a way that reflects own local context/needs. 	<ul style="list-style-type: none"> Can challenge national comparability. Differences in sub-national definitions of SEN can hinder common policy approaches. Students may not get the same support and treatment across different sub-national units.
Labelling SEN	<ul style="list-style-type: none"> Can support the adequate allocation of resources and assistance. Could help target and address individual students' SEN. 	<ul style="list-style-type: none"> Can reduce academic expectations of students, parents and/or teachers. Could increase risks of stigmatisation, lower self-esteem and discourage socialisation with other students.

Sources: Higgins et al. (2006_[182]); OECD (2012_[11]).

4.1.2. Regulatory frameworks: more or less decentralised?

The decentralisation of education systems is a highly relevant topic in policymaking across and within countries as it can influence policies and practices of inclusive education (Agency for Special Needs and Education, 2017_[184]). Several education systems have increasingly strengthened the autonomy of school districts or schools with the aim of achieving greater efficiency and better meeting local needs (OECD, 2018_[185]). In this respect, decentralising education systems can contribute to improving the quality of education provision and academic outcomes, while potential side effects such as local and regional inequalities and conflicting policies are carefully considered in the policy-making process (UNESCO, 2018_[186]). Thus, the effectiveness of SEN policy reforms often resides in getting the right equilibrium between centralisation and decentralisation (Agency for Special Needs and Education, 2017_[184]). For these reasons, the design of regulatory frameworks for SEN policy governance arrangements should consider the advantages and disadvantages of having more or less decentralised systems in place (Table 4.2).

Having more decentralised regulatory systems for SEN policies and practices can create opportunities to improve the effectiveness of information sharing regarding local needs of students with SEN and more targeted local responses. A higher level of decentralisation can reduce the bureaucratic procedures of highly centralised systems. Furthermore, by reducing the distance between decision-makers and local needs, key local stakeholders, such as parents and teachers, can be better included in designing and implementing approaches to address students' SEN and improve the quality of services offered (Ibid.). If accompanied by accountability measures, it can also increase competition among local authorities, which, in turn, can lead to greater efficiency in service delivery (Busemeyer, 2012_[187]; Urbanovič and Patapas, 2012_[188]).

On the other hand, higher levels of decentralisation can lead to increasing financial and bureaucratic pressure on school districts, single schools and local actors. Additionally, when there is insufficient co-ordination between education ministries and decentralised structures, or when the latter lack adequate training on decision-making, management skills and/or sufficient funding, the effectiveness of decentralised regulatory systems can be hindered (Bernbaum, 2011_[189]).

Acknowledging such potential risks, solid co-ordination and monitoring across the ministries involved in the provision of services for students with SEN and sub-regional bodies need to be in place for decentralised systems to be effective and efficient (Agency for Special Needs and Education, 2017_[184]). The OECD (2018_[190]) suggests that greater school autonomy can lead to successful outcomes if backed with strong national co-ordination and accountability frameworks, well-designed school-level interventions, and positively competitive inter-school environments. Putting in place a system of information, data and practice sharing on expenses and service provision for students with SEN across schools can foster more transparent, accountable and collaborative environments at local levels (Ibid.).

Table 4.2. Advantages and disadvantages of decentralised regulatory frameworks

Advantages	Disadvantages
<ul style="list-style-type: none"> Decentralising can better target and address local needs. It can promote the inclusion of key local stakeholders in the decision-making process, shorten bureaucratic procedures, and improve quality of education. Increased local competition among schools could lead to greater efficiency in service delivery. 	<ul style="list-style-type: none"> When lacking co-ordination between central and sub-central actors, there could be accountability, effectiveness and equity concerns. If not well equipped and not adequately resourced, local systems could encounter bureaucratic overloads. Increased competition among schools could create an environment of negative competition. Local competition could also stress local inequalities and disparities.

Sources: Agency for Special Needs and Education (2017_[184]); Bernbaum (2011_[189]); Busemeyer (2012_[187]); Urbanovič and Patapas (2012_[188]).

4.1.3. Special education or mainstream schools?

Most countries have started to shift towards the provision of more inclusive education for students with SEN in mainstream school settings (D'Alessio, Donnelly and Watkins, 2010_[191]; OECD, 2005_[192]; World Health Organization, 2011_[193]), but significant differences remain. This section aims to explore the advantages and disadvantages of two-track approaches that establish the enrolment of students with special education needs in special school settings.

Some of the arguments for separate special education settings highlight the benefits of providing specialised support and assistance in order to meet individual students' SEN. Furthermore, teaching staff and school personnel in special education settings can be more likely to be appropriately qualified to provide education and support to students with SEN. Finally, in special education settings, students interact with peers who have similar challenges; this can be a positive aspect in promoting feelings of inclusion and acceptance in the classroom (Table 4.3).

For many, enrolling students in school settings restricted to students with SEN represents a main disadvantage of special education. On top of potentially obstructing some leading principles of inclusive education, special education settings promote the interaction of students with SEN only among themselves, deterring socialisation with peers without SEN. This is believed to lead to marginalisation and stigmatisation, thus hindering social and societal inclusion (Keslair and McNally, 2009_[54]). Furthermore, academic expectations and outcomes are considered to be lower in special education than in mainstream settings (Section 2.1.1). When transferring to mainstream schools from more segregated school environments, students with SEN could encounter non-negligible academic and socio-emotional challenges (European Agency for Development in Special Needs Education, 1999_[194]; Gibb et al., 2007_[195]).

From an economic efficiency viewpoint, the costs of inclusive education often remain difficult to determine, despite the existing literature addressing a diversity of topics related to the field. In general, a variety of international organisations and studies [e.g. (Nusche et al., 2015_[196]; UNESCO, 2009_[197]; UNICEF, 2015_[198]; European Agency for Special Needs and Inclusive Education, 2016_[199])] acknowledge inclusive education to be less costly than special education. Nonetheless, significant levels of funding are necessary to effectively implement and maintain inclusive education settings, and additional investments may be needed to respond to a diversity of issues arising from inclusive education processes (e.g. teacher training). There remains great scope in international literature to investigate the cost drivers of inclusive education and how funding for inclusive education can be addressed, such as either through the channelling of additional resources or productivity gains.

Table 4.3. Advantages and disadvantages of special education settings

Advantages	Disadvantages
<ul style="list-style-type: none"> • Full-time specialised support to meet the individual needs of students with SEN. • Typically, lower student-teacher ratios in special settings allow students to receive higher and more individualised support. • All teachers working in special education should be specialised. • Students interact with peers with similar challenges. 	<ul style="list-style-type: none"> • Special education settings can lower academic expectations of students with SEN. • Special education settings are understood to be more costly, and transition to mainstream schools from special settings can entail academic and socio-emotional challenges for students. • Lack of integration with students without SEN. Risks of stigma and lack of societal inclusion in school and later in life.

Sources: D'Alessio, Donnelly and Watkins (2010_[191]); European Agency for Development in Special Needs Education (1999_[194]); Keslair and McNally (2009_[54]); OECD (2005_[69]); WHO (2011_[193]).

4.2. Understanding different resourcing schemes

The allocation and management of resources to support students with SEN has an impact on the delivery of education services and supports. Funding mechanisms to address students with SEN can be categorised into three main models based on conditions for funding and direct recipients of funding: *input*, *throughput* and *output* models (Section 3.2.1). Overall, each model has its own advantages and disadvantages and can have an impact on the education provision and learning of students with SEN (Mitchell, 2010_[168]).

The advantages and disadvantages of the three funding models proposed may vary in terms of their influence on labelling and defining SEN and including different stakeholders in decision making, the incentives they produced, and the effects of such incentives on inclusive education, efficiency and accountability of education systems. Together with a variety of contextual factors, these advantages and disadvantages should be taken into account when designing and implementing financing schemes for SEN (Table 4.4).

4.2.1. Demand-driven input model

As the *input* model is demand-driven, some of the advantages of implementing such schemes include opportunities to cover needs more comprehensively, promoting direct links between resources and needs, and supporting parental choice. However, the demand-driven nature of the funding conditions for the *input* model might lead to an over-identification of special education needs and a lack of direct incentives to improve the quality of services provided to students with SEN.

Input-driven models not directly linking funding to any particular destination can increase parents' decision-making power in choices concerning their children's education (Fletcher-Campbell et al., 2003_[200]). When directly receiving resources to support the education of a child with SEN, parents have generally more freedom to decide how and where to spend the allocated resources. This, however, might not only increase risks of parents not taking optimal schooling decisions on how to address their child's SEN, but it can also lead to increasing inequalities. Families with socio-economic disadvantages might encounter greater difficulties in making choices concerning their children's education due to limited resources (NESSE, 2012_[60]).

With respect to school choice, input schemes might create some sort of market incentives among schools. Funding being linked to an individual student's SEN, parents might more easily change schools if not satisfied with the services provided in an institution. This could create a degree of negative competition among schools to attract students. Schools might tend to accept students with SEN not causing them significant additional burden but providing them with additional funding (Meijer, 1999_[201]). These risks can be minimised by designing and implementing a rigorous identification system for special education needs. The financial resources needed to design and implement such systems could however be considerable (Ibid.).

Box 4.1. The experiences of Ireland and the Netherlands with *input* models

The Irish National Council for Special Education Needs' new funding model (2014)

Ireland used to allocate additional resources for students with SEN based on the identification and assessment of individual students' SEN. While doing so, the country acknowledged the risks of over-identifying special education needs in certain minority groups and negative academic and social outcomes arising from labelling students. In 2014, the Irish National Council for Special Education Needs designed a new policy to allocate resources for students with SEN based on each school's educational profile, considering the number of students with SEN enrolled and the social context of the institution (Kinsella, Murtagh and Senior, 2014_[202]).

The Netherlands and the effects of the Backpack Policy (2003)

In 2003, the Netherlands implemented the Backpack policy, a policy allocating student-bound budgets to students meeting certain criteria for SEN support. Students and families could directly decide how to employ the budget to support students' SEN. The introduction of the input model, however, led to a disproportionate increase in the number of students eligible for funding for SEN support (Gubbels, Coppens and de Wolf, 2018^[203]). Most of the students that were newly identified as having SEN were already enrolled in mainstream settings (Pijl, 2016^[204]).

To counter further risks, it was later suggested to implement backpack policies only for moderate/severe special education needs to minimise the possibilities of over-identification. In 2014, the Netherlands reformed funding mechanisms for students with SEN from an *input* to a *throughput* model. This allocated funding only for students with SEN based on the number of students identified as having SEN in a regional partnership, but for the total number of students served by that regional partnership to nationally re-equalise budgets for SEN (Gubbels, Coppens and de Wolf, 2018^[203]).

4.2.2. Supply-driven throughput model

Unlike the input scheme that directly requires the labelling of students with SEN and clear definitions of special education needs, the throughput model bases its conditions for funding on services provided, and not on the demand for SEN support. This model does not directly require labelling students with SEN and, consequently, can reduce the risks of over-identification and stigmatisation induced by labelling (Pijl, Meijer and Hegarty, 1997^[205]). However, not directly linking conditions for funding with a demand-driven scheme can mean that schools may not always have sufficient financing to cover the needs of individual students with SEN (Meijer, 1999^[201]).

Throughput models usually pre-determine the number of students eligible for funding and decentralise the allocation and management of funds at sub-central levels. This can create opportunities for predictable, stable and simplified funding mechanisms that can enhance flexibility (European Agency for Development in Special Needs Education, 1999^[194]). However, similarly to the *input* scheme, the *throughput* model does not directly create incentives to improve the quality of resources. Furthermore, it can shape different incentives depending on conditions for funding and resource destinations. In this respect, mainstreaming can be incentivised if resources are directly allocated for inclusive education, whereas incentives for special education can arise if special schools receive most of the funding (Shewbridge, 2016^[120]).

4.2.3. Output model: outputs or progress achieved?

Contrary to *input* and *throughput* schemes, the *output* model links quality of services to conditions for funding and directly promotes a set of valuable outcomes and results (Fletcher-Campbell, 2002^[206]). This, however, entails the risk of not channelling resources where the need is higher, as well-performing schools may receive most of the funding that lower-performing schools would need more (Meijer, 1999^[201]). Output models might also

enhance risks of competition among schools and the transfer of low-performing students to other schools (Ibid.).

Despite such general considerations, the advantages and disadvantages of *output* models may vary according to their specificities on conditions for funding, more precisely, on whether funding and/or funding premiums are based on outputs or progress achieved. When progress achieved stands as a main condition for funding, this can create more positive incentives to improve the quality of services (Fletcher-Campbell et al., 2003^[200]; Shewbridge, 2016^[120]).

Table 4.4. Advantages and disadvantages of input, throughput and output models

	Advantages	Disadvantages
Input scheme	<ol style="list-style-type: none"> 1) Direct linkage between needs and resources. 2) Identification of students with special education needs can be based on an official and shared assessment. The demand-driven nature of the model supports comprehensive coverage of SEN. 3) As funding is not directly linked to expenses, this system might promote cost efficiency. 4) Support of parental choice. 	<ol style="list-style-type: none"> 1) No direct incentives to improve the quality of services provided. 2) The cost of assessing special education needs: Demand-driven models might increase the risks of over-identifying SEN. 3) Demand-driven models that risk over-identification of special education needs might create risks of budget inflation. 4) Parental power in decision making might not always lead to informed decisions concerning their children's education. It might also increase social inequalities and competition among schools.
Throughput scheme	<ol style="list-style-type: none"> 1) Funding is generally stable and predictable. 2) Can support a good balance between local flexibility and accountability. Opportunities for implementing an incentive-based system. 3) Less administrative burden might stimulate greater efficiency. 4) It favours education in inclusive settings and entails less direct risks of stigmatising because no labelling is directly required. 	<ol style="list-style-type: none"> 1) The simplicity of the funding mechanism might lead to a less adequate, flexible and equitable allocation of resources. As the model is not directly driven by the demand of special education needs, high concentration of SEN in one area might not always imply sufficiency of funding. 2) Vulnerable to cost expansions and entails greater administrative costs. 3) It is not clear whether resource-based systems entail cost efficiency. 4) No direct incentives to improve quality of services.
Output scheme	<ol style="list-style-type: none"> 1) Promotes a set of desirable results. 2) Hinders the risks of incentivising schools not to improve performance. 	<ol style="list-style-type: none"> 1) Risk of not channelling resources where the need is greater. 2) Risk of inducing the transfer of low-performing students to other school settings and enhancing competitions among schools.

Source: Table readapted from Shewbridge (2016^[120]).

4.3. Strategies to develop teachers and school staff capacity

Developing the capacity of teachers and school staff to address students with SEN is a main policy area in promoting inclusive education policies and practices (Section 3.3), especially when acknowledging that special education needs remain the most needed topic for

continuous professional development by teachers across OECD countries (OECD, 2019^[138]).

When designing policies concerning teacher education and trainings for teachers, principals and other school personnel to foster the inclusion of students with SEN, advantages and disadvantages of different approaches should be taken into account (Table 4.5 and Table 4.6). As teacher education and professional development is a complex and continuous process where teachers are both subjects and objects of learning and development (Avalos, 2011^[207]), the ways in which ITE, teacher practicum and continuous professional development are designed and implemented contribute to the effectiveness of a broad range of inclusive education policies.

4.3.1. Initial teacher education

Including courses on SEN in initial teacher education has the benefit of preparing mainstream teachers to address a diversity of student needs that they may encounter in the classroom. However, many compulsory courses for student teachers only include limited academic courses on SEN, which are often stand-alone courses not sufficiently linked to, and integrated with, other fields of teacher education, as shown by a report by the European Agency for Development in in Special Needs Education (2011^[208]). In this respect, Cameron and Cook (2007^[209]) find that mainstream teacher education curricula in a large U.S. mid-western university include on average 1.5 courses on special education needs and inclusive education, compared to 11 courses for specialised teacher students in SEN.

Another challenge with ITE is that academic courses on SEN may not fully prepare teachers to address and deal with the complex diversity of special education needs. As such, teacher practicum on SEN has the advantage of contributing to the preparation of new teachers to address students with SEN in the classroom. The main benefits of teacher practicum include the facilitation of positive feelings and interaction between teachers and students with disabilities (Carroll et al., 2003^[210]). Empirical evidence shows that mainstream teachers participating in teacher practicum focused on special education needs feel more skilled to address students with SEN as, once in the classroom, they are able to focus more on the person rather than on the student's disability (Ibid.). Similarly, the OECD (2014^[211]) recognises induction and mentoring programmes for new teachers as helpful tools to acquire strategies and skills to address individual students' needs.

Table 4.5. Advantages and disadvantages of approaches to include SEN in teacher education

	Advantages	Disadvantages
Mandatory courses on SEN in ITE	Can start to prepare teachers to address SEN and promote inclusive education.	They are often limited in number and scope of topics covered. In addition, they are not always sufficiently integrated with other courses.
Having teacher practicum and mentoring on SEN	Can complement student teachers' academic courses on SEN and support teacher preparation to address SEN. New teachers participating in teacher practicum often feel more skilled to address students with SEN.	Mentoring for new teachers is effective when existent teaching staff in the school are already well prepared to address SEN. Teacher practicum and professional development cannot be mutually exclusive.

Sources: Avalos (2011^[207]); Cameron and Cook (2007^[209]); Colbert et al. (2008^[212]); Conley and You (2017^[213]); Desimone et al. (2002^[214]); Grissom and Harrington (2010^[215]); European Agency for Development in Special Needs Education (2011^[208]); Schleicher (2014^[211]).

4.3.2. Continuous professional development

Well-designed and effectively implemented professional development complements teacher education and teachers' ability to respond to diverse special education needs, thus promoting inclusive education. Continuous professional development remains an important tool for sharing good practices in the classroom and fostering an inclusive educational environment for students with SEN.

Despite the increase in provision of continuous development training on special education needs, many teachers still do not appear to feel well prepared to deal with students with SEN in mainstream classes (OECD, 2018^[144]). Data from the 2018 OECD Teaching and Learning International Survey (TALIS) reveals that teaching students with SEN remains the area where the largest share of teachers report high needs for further professional development training (OECD, 2019^[138]).

Continuous professional development remains crucial for teacher professionalism and the use of best practices in the classroom to address students with SEN. This is particularly important when acknowledging that teachers' low expectations for the outcomes of students with SEN and their perceived ability to respond to their needs significantly influence the dropout rate of students with SEN (Wehby and Kern, 2014^[216]) and that, inversely, higher-quality teaching can reduce student dropout (European Agency for Special Needs and Inclusive Education, 2016^[160]).

Table 4.6. Advantages and disadvantages of approaches to promote continuous professional development on SEN

	Advantages	Disadvantages
Continuous professional development on SEN	<ul style="list-style-type: none"> • Supports continuous teacher learning and ability to respond to students with SEN if well designed and implemented. • Can help teachers promote positive learning and inclusive environments in the classroom. 	<ul style="list-style-type: none"> • Mandatory continuous professional development does not necessarily imply effectiveness of outcomes.

Source: European Agency for Special Needs and Inclusive Education (2016^[160]); OECD (2018^[144]); Wehby and Kern (2014^[216]).

4.4. Promoting effective school-level practices

School-level interventions are important tools for promoting inclusive education and supporting students with SEN. To develop them effectively, a careful analysis of the main advantages and disadvantages of different strategies is required.

4.4.1. Diverse types of classroom strategies

Aside from enrolling students with SEN in special schools, they can also be included in diverse types of classrooms within mainstream education settings. These range between special classes, integrated SEN classes, withdrawal SEN classes, mainstream classes with direct special teaching support, and mainstream classes with indirect special teaching support (Section 3.4.1).

As the analysis of the advantages and disadvantages of two-track approaches focused on special schools (Section 4.1.3), this section only considers the advantages and disadvantages of a variety of existing classroom strategies for students with SEN within mainstream settings (Table 4.7). It is acknowledged that choices around different classroom options might vary depending on the typology, degree and comorbidity of individual students' SEN.

Table 4.7. Advantages and disadvantages of different classroom strategies

	Advantages	Disadvantages
Special classes	<ul style="list-style-type: none"> • Full-time support by teachers specialised in SEN • Lower teacher-student ratios • Children interact with peers who also have challenges 	<ul style="list-style-type: none"> • Lack of integration and interaction with students without SEN and risks of marginalisation and stigmatisation • May be costly in terms of resources required • Transition to mainstream classes might be challenging
	They may be useful for students with severe SEN, thus needing full-time support and extensive accommodations and modifications	
Integrated SEN classes	<ul style="list-style-type: none"> • Support by teachers specialised in SEN • Interaction with students with and without SEN • Transition to mainstream classes may be easier 	<ul style="list-style-type: none"> • Challenges in offering two different learning methods • Risk of marginalisation and stigma • It may be expensive
	They may be useful for students who do not need full-time SEN support and fewer accommodations	
Withdrawal SEN classes	<ul style="list-style-type: none"> • Specialised support by teachers trained on SEN • Interaction with peers without SEN and fewer risks of marginalisation and stigma • Less expensive 	<ul style="list-style-type: none"> • Part-time support might be acknowledged as a limit of such classroom settings • Risks of lack of co-ordination with learning in mainstream classrooms • Risks of less availability of SEN resources and services
	They may be useful for students who do not need full-time SEN support and could benefit from an alternative learning setting	
Mainstream classes with direct teaching support	<ul style="list-style-type: none"> • Specialised support (often part-time) • Interaction and inclusion among students without SEN and lower risks of stigmatisation and marginalisation. Social opportunities for families and parents • Less expensive 	<ul style="list-style-type: none"> • Part-time support might be acknowledged as limiting • Mainstream teachers may not always be sufficiently specialised in SEN • Risk of less availability of SEN resources and services
	They may be useful for students who need full-time or part-time SEN support while being included in a mainstream classroom	
Mainstream classes with indirect support	<ul style="list-style-type: none"> • Specialised support (often part-time) • Interaction and inclusion among students without SEN and lower risks of social stigma and marginalisation. Social opportunities for families and parents • Less expensive 	<ul style="list-style-type: none"> • Part-time support might be acknowledged as limiting • Mainstream teachers may not always be sufficiently specialised in SEN • Risk of less availability of SEN resources and services • Risk of challenges in adapting education provision to meet individual needs
	They may be useful for students who do not need full-time support of specialised SEN teachers and do not need extensive modifications and accommodations	

Source: Information re-adapted from Our Kids (2019_[146]).

4.4.2. One-to-one and small-group tuition

The review has identified two main approaches to delivering specialised teaching support to students with SEN: one-to-one and small-group instruction (Section 3.4.1). They have

different advantages and disadvantages which can vary depending on individual students' SEN (Table 4.8).

One-to-one tuition

Overall, one-to-one tuition ensures that a specialised teacher or teaching assistant carefully follows every student with SEN individually either part time or full time. In such a setting, students are encouraged to learn at their own pace with fewer time constraints and less pressure compared to group environments (Grasha, 2002_[217]). Furthermore, one-to-one tuition does not stimulate competition with other students; this, for many, represents a positive aspect of such an approach.

However, limiting learning inputs and stimuli to only one teacher without including opportunities to learn alongside peers could discourage students with SEN. As a matter of fact, interacting only with a teacher could make the learning less varied and could enhance feelings of marginalisation with respect to the rest of the classroom. From an economic perspective, one-to-one approaches can also be relatively expensive (Education Endowment Foundation, 2018_[218]).

Small-group approach

Unlike one-to-one tuition, the small-group approach encourages peer learning and interaction. Specialised teachers provide support to small groups of students with SEN ensuring that students learn at their own rhythm and receive more support and feedback than in mainstream settings. Compared to one-to-one approaches, small groups can stimulate more active and deeper learning on top of strengthening socialisation and peer learning (Jones, 2007_[219]). Small group instruction can also be more efficient in terms of resource and time management than one-to-one strategies (Bertsch, 2002_[220]), even if additional investments and resources may be needed to provide specialised staff and teaching rooms (Jones, 2007_[219]).

Small-group learning might create pressure and anxiety in students who are less active participants in discussions and group works. Further challenges could arise if teachers are used to teacher-centred teaching strategies as small-group learning entails more student-centred approaches (Bertsch, 2002_[220]).

Table 4.8. Advantages and disadvantages of one-to-one and small group tuition

	Advantages	Disadvantages
One-to-one tuition	<ul style="list-style-type: none"> • Individual support by specialised teachers • Fewer time constraints, pressure and anxiety • Lack of competition with other students can be perceived as a positive aspect 	<ul style="list-style-type: none"> • Risks of marginalisation and exhaustion, lack of encouragement • Risks of not ensuring enough individual and independent learning time to the student without support by teacher • Lack of peer learning • Can be relatively expensive
Small-group approach	<ul style="list-style-type: none"> • Increased communication between teacher and students compared to standard learning in mainstream classes • Easier tailoring of learning and activities to individual students' learning pace than in mainstream learning • Promotes more active learning, peer learning and socialisation among students compared to one-to-one approach • Allows students to check and clarify notions learnt and promotes deep rather than surface learning 	<ul style="list-style-type: none"> • Might create pressure and anxiety for students who are not prone to be active participants in small-group interactions • Challenges if teachers are used to teacher-centred strategies as small-group tuition entails student-centred strategies • Often requires additional investments and resources to provide adequate staff and teaching rooms

Sources: Bertsch (2002_[220]); Education Endowment Foundation (2018_[218]); Grasha (2002_[217]); Jones (2007_[219]).

4.4.3. Assistive technology

When appropriately used, AT can contribute to improving school access and participation for students with SEN. Therefore, policies and school-level interventions should consider advantages and disadvantages of AT carefully (Table 4.9).

Main advantages of assistive technology concern both academic and social outcomes. Assistive technology can improve students' ability to acquire and strengthen skills such as handwriting, reading, and visual skills, as well as enhancing their problem-solving ability and attention span. From a socio-psychological perspective, AT can contribute to enhancing students' independence, social interactions, motivation and self-esteem (Copley and Ziviani, 2004_[221]). For instance, video-self monitoring (that is a strategy to teach behaviours and skills by using videos recorded as models) and e-book AT appear to have great potential for students with Emotional Behaviour Disorders to develop and sustain social relationships with peers (Murry, 2018_[66]).

Assistive technology does not only have advantages linked to enhancing opportunities for students' learning, but also direct potential for schools. AT can be economically convenient. For example, digital examination papers can be a more cost-effective means to mark exams than using readers or scribes to assess students with diverse SEN (Nisbet, 2012_[222]).

Despite the advantages of assistive technology on student outcomes, some challenges might arise when using AT to support the inclusion of students with SEN in schools. Copley and Ziviani (2004_[221]) identify six main categories of evidence-based challenges concerning the use of assistive technology to support students with SEN. These relate to I) staff training and attitudes, II) assessment, III) planning, IV) funding, V) equipment issues and VI) time constraints.

First, inadequate training for teachers can be a major obstacle to making effective use of AT (OECD, 2015_[223]). Limits to the effectiveness of AT can also arise when the assessment of a student's SEN is poorly carried out and when there is an inadequate identification of the necessary AT equipment to support a student's learning activities (2004_[221]). If schools lack sufficient financial resources to afford and sustain the costs of needed AT devices, the effectiveness of AT usage could also be limited. Finally, time may also hamper the effectiveness of assistive technology if it takes considerably long to obtain and prepare the equipment, as well as to train students and teachers on how to use it (Ibid.). Finally, the effectiveness of AT could be also challenged by the risk of stigmatisation arising from AT usage. This could be due to reasons related to perceived gender and age appropriateness of AT device aesthetics induced by diffused stereotypes, such as gender stereotypes linked to colours. Stigmatisation due to AT usage could also be triggered by other factors, such as teachers' negative attitudes in supporting students with SEN who deploy AT in the classroom (Parette and Scherer, 2004_[224]).

Table 4.9. Advantages and disadvantages of assistive technology

Advantages	Disadvantages
<ul style="list-style-type: none"> • AT can contribute to enhancing students' independence, social interactions, motivation and self-esteem. • AT can improve students' ability to acquire and strengthen skills such as handwriting, reading and visual skills, as well as enhancing their problem-solving ability and attention span. • AT can also be economically convenient (e.g., digital examination papers can be more independent and cost-effective means compared to readers and/or scribes). 	<ul style="list-style-type: none"> • Limits for AT if teachers and school personnel are not adequately trained. • Challenges when there is an inadequate assessment of SEN and planning of interventions. • Scarcity of resources to afford and maintain necessary AT equipment and finance training can challenge AT effectiveness. • Insufficient timing challenges effectiveness of training, assessment and planning, equipment provision, and service delivery.

Sources: Copley and Ziviani (2004_[221]); Nisbet (2012_[222]); OECD (2015_[223]); Parette and Scherer (2004_[224]).

4.4.4. Enhancing parental and community engagement

To ensure the implementation of a whole-school approach to address students with SEN through inclusive education policies and practices, parental engagement and partnerships with communities and community-level services should be promoted by schools taking into account the disadvantages that might arise when such approaches are not effectively designed and implemented.

Engaging families of students with SEN

Parental engagement in educational choices concerning their children's SEN can be an important driver of students' adaptive and learning performances. At the same time, poor parental confidence and lack of engagement can become highly problematic for students with SEN as parents are essential resources to share information and collaborate with teachers and professionals (Barlow and Humphrey, 2012_[167]). Despite advantages of including parents in decision making and in the co-implementation of educational approaches to address students' SEN, potential shortcomings and challenges of enhanced parental engagement have to be acknowledged when designing school-level programmes and strategies (Table 4.10).

Promoting partnerships between parents and schools can include enhancing communication and collaboration, involving parents in volunteer opportunities in school,

Box 4.2. Promoting partnerships between schools, parents and whanau in New Zealand

In 2008, New Zealand's Education Review Office published an external evaluation carried out in more than two hundred schools to investigate the impact of the engagement of parents and whanau⁸ on students with SEN. The assessed benefits not only include improved academic and social outcomes for students with SEN, but also positive impacts on parental roles.

In particular, the study found that consolidating partnerships between schools and parents and/or whanau has positive effects on strengthening relationships between children, parents and/or whanau and on the educational roles of the family at home. Furthermore, enhancing co-operation between parents/whanau and schools leads the family to better appreciate their children's talents and skills. It also increases their sense of contribution to the children's learning and the frequency and quality of opportunities to meet and exchange with other parents.

Sources: Mutch and Collins (2012_[225]); New Zealand's Education Review Office (2008_[226]).

home learning activities and promoting child-raising skills (Barlow and Humphrey, 2012_[167]). These practices can lead to benefits for student academic and socio-emotional well-being as well as for parents to promote their parental roles.

Parent training programmes such as behavioural parent training and parent-child interaction therapies are considered to be advantageous for both parents and children (Mitchell, 2010_[168]). Such programmes allow parents to gain strategies to monitor their children's behaviour and effectively manage it by learning positive enforcement techniques (Ibid.). Similarly, parent-child interaction programmes aim to teach parents how to develop responsive and positive relationships with children having developmental, behavioural or emotional issues (Ibid.). Engaging parents of students with SEN can lead to improvements in students' academic performance, school participation and behaviour (Barlow and Humphrey, 2012_[167]).

Strong partnerships between parents and schools to address students with SEN can benefit students at all grade levels. In practice, however, parental engagement strategies are still not always implemented effectively (Hornby and Lafaele, 2011_[227]). First, education systems often lack guiding frameworks and adequate training to promote parental interventions (Pomerantz, Moorman and Litwack, 2007_[228]). Second, obstacles hindering effective partnerships between parents and schools can arise when conflictual situations between different stakeholders emerge from co-dependent factors such as parent-teacher interactions (Hornby and Lafaele, 2011_[227]). These can be linked to discrepant opinions on a student's needs, conflictual knowledge and power dynamics, issues related to planning, service delivery and evaluation, inadequate communication, and insufficient trust, as well as time and financial constraints (Lake and Billingsley, 2000_[229]). For instance, challenges to implementing well-established partnerships between parents and schools can be due to divergences between parents and teachers with respect to strategies to address a student's

⁸ *Whanau* is often translated as family. Its meaning comprehends emotional, physical, and spiritual dimensions. It is based on Maori and a tribal perspective according to which whanau represents the means through which cultural and traditional norms are transmitted across generations (Te Ara - The Encyclopedia of New Zealand, 2019_[234]).

SEN or considerable differences in academic expectations held by the family and educators (Seligman, 2000_[230]).

Enhancing partnerships with the local community

When analysing advantages and disadvantages of fostering school-level partnerships with community services, the benefits can be various. Integrating within-school education activities with community-level services can support a whole-school approach aimed at addressing various dimensions of academic, social, psychological and physical well-being of students with SEN. Furthermore, community-level services can serve as complementary activities to support students' educational and therapeutic activities outside the classroom. To ensure their effectiveness, schools and community services must have solid communication and co-operation in place.

Evidence from the U.S. shows that early childhood programmes that include partnerships with community-based services and families decrease the likelihood of students being placed in special education in third grade (Dodge et al., 2017_[231]), an academic year that is often associated with an increasing deficit in reading skills and academic outcomes (Aron and Loprest, 2012_[232]). Similar to partnerships with parents, lack of co-ordination and communication between schools and community services, as well as insufficient or mismanaged funds, can hinder effective collaboration and hamper programme effectiveness.

Table 4.10. Advantages and disadvantages of enhancing parental and community engagement

	Advantages	Disadvantages
Parent and family engagement	<ul style="list-style-type: none"> • It can improve students' academic performance, school participation and behaviour. • Parent training programmes (e.g. behavioural parent trainings and parent-child interaction therapies) are advantageous for both parents and children. • Solid partnerships between families and schools improve parents' educational role at home and promote their skills to address children's behavioural challenges. • It increases appreciation of the sense of contribution to the children's learning and the frequency and quality of opportunities to meet and exchange with other parents. 	<ul style="list-style-type: none"> • Poor parental engagement negatively affects academic and social well-being of students with SEN. • Parental engagement strategies are still not always implemented effectively. • Frequent lack of guiding frameworks and adequate trainings to promote parental interventions. • Conflictual situations among different stakeholders can challenge school-family partnerships due to discrepant opinions, conflictual knowledge and power dynamics, issues related to planning, service delivery and evaluation, inadequate communication and insufficient trust. • Time and financial constraints can hinder the effectiveness of school programmes enhancing parental participation.
Community engagement	<ul style="list-style-type: none"> • Can support a whole-school approach. • Can provide complementary support for students' educational and therapeutic activities. • Partnerships with community-based services and families in early childhood decrease the likelihood of students being subsequently placed in special education. 	<ul style="list-style-type: none"> • Challenges due to time and financial constraints may hinder effective community engagement. • Lack of co-ordination and community between schools and community services decreases effective implementation of programmes and hinders an effective promotion of a whole-school approach. • Insufficient or mismanaged funds can be significant challenges.

Source: Aron and Loprest (2012_[232]); Barlow and Humphrey (2012_[167]); Dodge et al. (2017_[231]); Hornby and Lafaele (2011_[227]); Lake and Billingsley (2000_[229]); Pomerantz, Moorman and Litwack (2007_[228]); Seligman (2000_[230]).

Conclusion: Breaking down the remaining barriers for students with SEN

Special education needs represent a key dimension of induced diversity in education systems. This includes a wide spectrum of learning disabilities, physical impairments and mental health disorders that, if not well addressed, can hinder students' well-being inside and outside of the classroom. As significant enrolment, graduation, employment and income gaps still exist for students with SEN across countries, promoting inclusive education for students with SEN becomes a core priority in countries with increasingly heterogeneous student populations. This entails the need to ensure accessible, acceptable, adaptable and affordable education systems for all students' needs.

Overall, countries have diverse policy approaches in place to provide education to students with SEN. This includes a variety of governance arrangements, resourcing schemes, capacity-building strategies and school-level interventions to support the learning of students with SEN and their broader well-being. Each policy approach has diverse advantages and disadvantages that must be carefully taken into consideration when designing and implementing inclusive education policies.

While many education systems provide condition-specific labels to define special education needs and set the eligibility criteria for specialised provision, others adopt label-free SEN classifications to minimise the risks of stigmatisation and marginalisation that could be linked to labels of disability and other conditions. In this respect, some countries avoid labelling students in the classroom but deploy SEN labels for administrative purposes. Similarly, some education systems refer to learning difficulties instead of learning disabilities and special education rights instead of special education needs to promote inclusive terminology. Definitions and classifications, in turn, have an impact on the ways in which education systems provide specialised resources, support and schooling to students with SEN. In this context, education provision for students with SEN has increasingly shifted from more segregated two-track approaches towards multi-track and one-track approaches, with a growing number of countries supporting inclusive mainstreaming of students with SEN. This is often carried out through a twin-track approach aimed at mainstreaming students with SEN while also targeting their specific needs, by combining support by specialised teachers and resources and promoting capacity-building strategies for the entirety of the school personnel. Whole-school strategies to support the inclusion of students with SEN are implemented by complementing the provision of in-school services, such as counselling and psychotherapeutic support, with external services in partnerships with other schools, specialised resource centres, local communities and students' families.

Despite considerable progress in implementing policy approaches aimed at promoting the well-being of students with SEN inside and outside of the classroom, countries still often lack robust monitoring and evaluation systems of SEN policies and statistics on students with SEN. Moving forward, education systems should continue to promote inclusive education for students with SEN by acting both at system and school levels. Ensuring that student well-being is addressed in all its dimensions through inclusive education policies and practices should be prioritised to promote broader socio-economic development in the context of increasingly complex and diverse societies. Countries should put greater effort into developing and implementing robust SEN policy monitoring and evaluation. This

should also include supporting efforts to improve national and international statistics on students with SEN and empirical evidence on the intersectionality of SEN with other dimensions of induced diversity in education. The latter comes as a priority to ensure that education systems are well equipped to respond to the variety of individual needs that may arise from the intersectionality of special education needs with other forms of induced diversity in student populations, such as migration, gender, gender identity, sexual orientation, ethnic groups, national minorities and Indigenous peoples, and giftedness, and overarching socio-economic and geographic dimensions.

Future research could focus on investigating approaches to preparing the diversity of the teaching body optimally and having ongoing professionalisation in place to support quality inclusive education. Strategies to deal with societal tendencies that are not necessarily conducive to, or supportive of, inclusion could also be investigated. Other underdeveloped research areas remain connected to the intersectionality of SEN with other dimensions of induced diversity and country responses to address individual students' needs arising from disparate intersectionality facets. Investigating the advantages and disadvantages of strategies for monitoring and evaluating inclusive education policies represents another research gap to be addressed.

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Annex A. SEN Policy approaches across selected OECD countries

Country	Some legislation and regulations on SEN and inclusive education	SEN legal definition and eligibility criteria	SEN and special education policies	Financing for education provision to students with SEN	Teacher education to address students with SEN
Australia	Disability Standards for Education (2005)	Differences across states and territories. Overall, eligibility for SEN concerns students with health-related conditions, learning difficulties, intellectual disabilities, physical disabilities, vision impairments, hearing impairments, language disorders, mental health conditions, autism spectrum disorders, disease-causing organisms. The criteria for enrolment of a student with SEN in a special school vary from one state to the other as Australian states have their own education programmes.	Special education is defined as teaching for students with learning needs that cannot be met by the standard Australian school curriculum. It may involve specialised exercises, subject matters or techniques appropriate to the needs of the student. Mainstreaming a student with SEN is preferable. However, different options are available: I) mainstream classes with a personalised curriculum and/or additional teaching resources/support; II) specialised classes with a lower student/teacher ratio within mainstream schools; III) special schools. To enrol students in a special setting, parents/guardians have to show a medical certificate of the disability/learning impairment of the child (which usually cannot date to more than two years before). Furthermore, a discussion between the parents/guardians and the special school staff on how the special provision could respond to the learning needs of the student in a more tailored way than mainstream settings is necessary.	The Schooling Resource Standard (SRS) model for funding for students with SEN was introduced in 2014 and was composed of flat loadings to respond to specific spheres of education impairments. Since 2018, funding for students with SEN has been based on the Nationally Consistent Collection of Data on School Students with Disability (NCCD). NCCD is a collection of data of all students receiving special support ranked in four degrees: I) quality-differentiated teaching practice, II) supplementary, III) substantial and IV) extensive support. The three last levels of special support are funded with disability loadings. Students with SEN in independent/private schools are eligible for funding from the Australian government and state/territory governments.	To become a teacher specialised in SEN, a bachelor's degree in education and specialisation in special education needs or post-graduate certificate in special education needs are necessary. Not all Australian states and territories include mandatory SEN training in initial teacher education, teacher practicum and continuous professional development.
Austria	Compulsory Schooling Act (1985); Provincial Disability Acts; Education Reform Act (2017), Decree of the Ministry of Education, Science and Research No. 7/2019 concerning the organisation and implementation of special needs education.	The Compulsory Schooling Act stipulates that pupils have special educational needs (SEN) when, as a consequence of physical or mental disabilities, they cannot follow teaching in a regular class at compulsory school without additional support measures. Special educational needs must be in a causal connection with an identified physical or mental disability of the pupil. Insufficient school performance or insufficient command of German without the identifying feature of disabilities therefore does not establish special educational needs.	Several recent legislative framework amendments have redirected SEN policies and practices towards mainstreaming students with SEN. Based on parental choice, students with physical or psychological disabilities can attend either a mainstream school with specialised SEN support or a special school. Students without certification of SEN are given SEN support by the Special Mobile Service in and/or outside of class in mainstream settings. Special education needs are assessed by the school district board following an application by parents/school principal/board itself.	Upon the parents' or legal guardians' request, instruction of children and young people can be held in integrative/inclusive classes at regular school or in special needs school. The allocation of resources (teaching staff) – both for integrative/inclusive classes and for special needs schools – is regulated in the School Organisation Act. These are granted, among others, on the basis of the pupils' need for support.	According to the newly introduced teacher education, inclusive education is obligatory for all students in teacher training – this part of the bachelor curriculum contains more ECTS than the previous curriculum for special school teachers. Various specialisations are of course offered in master courses. Moreover, teacher training colleges offer a variety of courses

					in the framework of in-service teacher training activities.
Canada	Education Acts (each province and territory have their own education system)	Overall, students with emotional, behavioural, intellectual, language, speech or hearing, or physical disorders are eligible for SEN. Some provinces include gifted students and students performing far beyond their grade level in the categorisation of students with SEN.	There is no federal special education provision as each province designs its special education policies and services. Most provinces and territories have an Education Act that outlines the necessary policy framework and registration, school enrolment and teaching procedures for students with SEN. Generally, schools provide programmes to include students with SEN in mainstream settings and personalised programmes according to the peculiarity of individual students' SEN. For instance, in Ontario, schools seek to accommodate all students with SEN through modified educational programmes or individual programmes and by ensuring access to necessary resources. There are also special schools for students with severe impairments (e.g. deafness and blindness) and severe learning disabilities.	Most of the funding for students with SEN is provided at provincial and local levels. For instance, Ontario provides school boards with SEN funding through the annual Grant for Students Needs that differentiates funding among funding for I) classrooms, II) schools, III) specific priorities and for IV) locally managed systems. School boards can deploy the grant allocated to students with SEN to better respond to local needs and implement local policies. Often, school boards deploy other sources of SEN funding on top of the grant provided by the province of Ontario.	As education policies vary across Canadian provinces and territories, trainings differs as well. Overall, school staff are usually trained to recognise SEN. SEN training in the form of professional development and university degrees focused on special education are offered across Canadian provinces and territories. For instance, in Ontario, the Ministry of Education developed a guide to support teachers and school staff in implementing services and programmes to address students with SEN.
Chile	Decree No. 490 (1990); Law 19.284 (1993); Decree No. 170 (2009); Law 20.422 (2010)	Special education needs include sensory, intellectual, motor, communication and language impaired, and gifted students.	There are three options for students with SEN: I) special education schools to serve students with sensory, intellectual, motor, communication and language impairments; II) mainstream schools with education integration projects for students with disabilities and special groups for students with learning disabilities; III) in-hospital schools and classrooms for students undergoing medical treatment. Only mainstream schools that have a School Integration Programme (Programa de Integración Escolar, PIE) can receive students with SEN.	Schools with a PIE receive resources to support students with SEN. Schools receive a higher basic school grant for each student with SEN enrolled. The funding has to be allocated to I) specialised staff (that includes specialised teachers and psychologists), II) co-ordinating and evaluating the school's PIE, III) continuous professional development on SEN for the whole school staff, and IV) providing further material and resources for students with SEN.	Schools with a PIE receive funds to spend in resources to support students with SEN, including professional development for all school staff in SEN.
Denmark	School Act 561/2004; Regulation on education of children, pupils, students with special needs and of gifted students and talented children, pupils and students 73/2005; Folkeskole Act (2012)	Individuals with severe physical and/or intellectual special needs are identified as students with SEN. Special education needs and other types of special education assistance shall be given to students whose development requires special consideration/support.	The understanding of special education needs has been recently restricted to teaching in special classes, special schools and students who require support for more than nine hours a week. The remaining types of support offered in mainstream settings is no longer identified as SEN, but as supplementary education. This new legislation aims at decreasing the number of students enrolling in special education to a maximum of 4% of all students. If mainstream education does not respond to the student's needs, special support is provided within mainstream schools. This can include differentiated teaching, counselling, assistive devices and personal assistance.	Services provided to students with SEN are financed by Denmark's public authorities. Local authorities can provide further personal and individualised assistance schemes and socio-pedagogical support for students with SEN. Municipalities pay the cost of specialised schools for blind, deaf and blind/deaf students.	Existing legislation on special education lays down the requirements for special education teachers. The 2012 reform made SEN mandatory within initial teacher education.

			<p>Municipalities run Folkeskolen⁹, including mainstream schools, schools with special classes and special schools. Municipalities can transfer students with SEN to other municipalities, but most communities create their own school system including special education.</p> <p>There are very few specialised schools for blind/deaf students that are run by regional authorities, but the costs are paid by municipalities and they decide on the transfer of students to and from such institutions. The state runs institutions for sharing knowledge and specialised counselling to municipalities regarding students with disabilities and SEN.</p>		
Finland	<p>Basic Education Act (1998) and its amendments; Upper Secondary Schools Act (629/1998); Amendments to the National Core Curriculum for Pre-Primary and Basic Education (2010); ECEC Act (2015).</p>	<p>Students have special needs when their possibilities for learning, development and growth diminish due to disability, sickness or decreased function. Students at risk or in need of psychological/social support have the right to receive learning support. Students with minor learning/adjustment difficulties are eligible to receive part-time special education along with mainstream education.</p>	<p>All children are entitled to attend their neighbourhood school. If in the neighbourhood school adequate education is not provided, an individualised plan for each student with SEN can decide the enrolment of a student either in a special class within a mainstream school or in a special school.</p> <p>The Finnish curriculum only outlines the principles for teaching; teachers have a rather high degree of freedom to choose their own teaching methods.</p>	<p>Education funding is divided between state and local authorities. Every student has the right to get free services enabling them to receive education. These include education provision, interpretation and assistance support, teaching and student welfare services (e.g. school doctor, psychologist, therapist, dentist, and social/health care) and any special support necessary to include students in the education system. Furthermore, school meals, transports, learning materials and healthcare at school are free for all students. Students with SEN have the right to receive free support and assistance in all those areas necessary for their schooling. The funding for specialised SEN services is covered partly by schools and partly by municipalities (as stated in the Act on Services and Assistance for the Disabled).</p> <p>Upper-secondary school students with SEN are eligible for the same rights and assistance services.</p>	<p>University degrees in SEN education are available and teachers can qualify as special kindergarten teachers, special needs class teachers or special needs teachers.</p> <p>To address students with SEN, schools provide not only specialised teachers but also psychologists, doctors, counsellors for students and teachers, therapists and staff working on school welfare and assistance. Special schools also provide social workers and other staff.</p> <p>Education departments in universities provide continuous professional development. The Ministry of Education and Culture and the National Board of Education offer state-funded projects for continuous professional development.</p>

⁹ The Folkeskolen is Danish municipal primary and lower secondary school.

France	Circular 90-082; Law 102/2005 (Education Code, L112-1 to L112-5); Decree No. 2005-1752; Circular 2006-126; Decree No. 2009-378; Decree No. 2012-903; Framework Act on the Reform of the Schools of the Republic (2013); Circular 2014-107; Decree No. 2014-724; Circular No. 2014-107; Law 2019-791 "Pour une école de la confiance".	There is no established definition and/or categorisation of students with SEN. According to Law 102/2005, "a disability is constituted by any limit on activity or restriction on the participation in social life endured by a person in his or her environment due to a substantial, durable or permanent alteration of one or several physical, sensory, mental, cognitive, psychic functions, to a multiple disability or to a disabling health problem". The commission on Rights and Autonomy of People with Disabilities (CDAPH) decides on the intensity and nature of special support to be given to a person with disabilities.	Any student with a disability/disabling health disorder is to be enrolled in the school closest to their home (their reference institution). Hence, no student with disabilities should be prevented from accessing mainstream education. In the case in which it is necessary for the student to be enrolled in a special school, the student has the right to enrol in a mainstream school close to the special school and to attend a mainstream school on either a part-time or full-time basis. Circular 126-2006 explicitly prioritises students' enrolment in their reference institutions. The French education system offers different plans to meet students' SEN within an educational setting. These plans are co-designed together with medical, social and health agents when necessary. They range among: I) individual support plan for students with health disorders; II) individual education plan for students with disabilities; III) personalised support scheme for students with learning difficulties; IV) personalised educational success programme for students with temporary school difficulties. There are different plans for students with disabilities depending on the characteristics of a student's SEN: I) full enrolment in a mainstream institution with a school schedule to comply with the hours agreed on by the CDAPH; II) part-time enrolment in mainstream setting and part-time enrolled in a teaching unit within a social/medical/healthcare institute (in this case, even if gradually, there should be a focus on schooling in the reference school); III) full education in special schools. The principal of the reference school needs to receive summaries of student's meetings and student's school reports.	Funding for students with SEN from pre-primary to secondary school is covered by the state. This includes the remuneration of specialised teachers, school assistants and additional costs linked to the personalisation of teaching and learning materials for students with SEN. Furthermore, the Education Allowance for Students with Disabilities (AEEH) is a service that compensates for the expenses related to their care and education.	Continuous professional development for teachers working with students with SEN have been increasingly implemented (e.g. Cappel, DDEAS, and ASH). Some of the training topics include: I) schooling of students with severe behavioural problems, learning impairments, developmental disorders, II) programmes to enhance digital tools for students with SEN, III) training of teachers and class assistants and for deaf students. Professional development training is carried out by teacher-training institutions and by the National Institute of Advanced Training and Research for the Education of Young People with Disabilities and Adapted Teaching (INSHEA). A recent reform (2017) on specialised teacher training in primary and secondary institutions has been implemented to enhance the role of specialised support staff as resources for standard teachers.
Germany	Basic Law (Grundgesetz, Art. 3 – R1), Social Code - Book XII (Sozialgesetzbuch XII – Sozialhilfe), Länder constitutions (R14-29)	Legal definitions and eligibility criteria for SEN are rather broad at the federal level because of different laws and regulations existing across German states. Overall, the area of responsibility of special needs education refers to SEN within the area of disabilities. Students with difficulties due to specific handicaps, in need of additional teaching support because of problematic situations and/or with temporary learning impairments receive support through measures within the mainstream education system.	Most students with SEN are enrolled in special schools. All German states have a system of special schools to respond to diverse special needs (that can be, among others, physical, mental and social in nature) at primary and secondary school levels. German states respond to SEN somewhat differently. Recently, the inclusion of students with SEN in mainstream settings has been promoted through several programmes.	The education system is financed at government, district and municipality levels. Over 90% of funding is provided by the Länder and local authorities. The latter finance non-teaching school personnel (e.g. support staff, nurses, social workers), whereas teachers (both standard and specialised teachers) are remunerated by the Länder. Some special schools are funded at the district level, others at the local level. Specialised teachers receive a higher remuneration that is equal to the salary of teachers in upper-secondary education.	University courses on special education are designed to form teachers capable of responding to students' SEN at all stages of education. In their initial teacher education, student teachers can select two courses on SEN that can cover topics such as education for blind/deaf, speech defect, emotional and social development, intellectual/physical/learning disabilities. In some Länder, an education course in the domain of inclusion and student disabilities is required

Greece	Law 3699/2008; Law 3879/2010; Law 4074/2012; Law 4368/2016; Decree No. 72877/D3/17.10.2016; Law 4452/2017	Law 3699/2008 (Art. 3) defines students with SEN as those having at least one of the following: physical/sensory/intellectual disability, non-curable chronic disease, specific learning impairment, speech disorder, ADHD, autism spectrum, mental health disorders. Students with SEN also include those with difficult emotional, social and cognitive situations, behavioural problems due to parental neglect, domestic violence or abandonment, as well as gifted and talented students. Slow learners and achievers due to specific ethnic/cultural backgrounds are not considered to be SEN students.	The Greek education system prioritises the inclusion of students with SEN in mainstream settings with or without specialised support. In the case in which the severity of SEN requires further intervention, students can attend special schools. Mainstreaming settings are available for: I) students without severe SEN who receive support by mainstream class teachers working together with Diagnostic Assessment and Support Centres (KEDDYs) and school advisors; II) students with SEN that can sustain the standard curriculum with individualised and personalised support III) when there is not the availability of special education settings; IV) when students' specialised support within mainstream settings is required following KEDDY's deliberation; V) when there is in-class/inclusive class support with an inclusion teacher for one or more students with SEN in collaboration with standard teachers. Inclusive classes either run as individual and common programmes of 15 hours/week or with longer timetable for students with more acute SEN. Students with SEN are to be allocated between different classes of the same grade in order to have no more than one student with SEN attending the same class (Art 11, Law 4452/2017). If this is not possible, the number of students in the class should be reduced to three less than the maximum permitted. The number of students with specific learning impairments enrolled in a mainstream class cannot be greater than four. If this is not possible and the school does not have any inclusive class system available, the number of students enrolled in the class could be reduced by three. Students can receive education in schools or school annexes in hospitals, disciplinary centres, rehabilitation centres, and chronic disease institutions and at home, when students cannot attend mainstream schools because of temporary or prolonged health issues. KEDDYs suggest the optimal education setting for a student's specific SEN and design an Individual Education Plan (IEP) for each student (with the collaboration of the student's parents/guardians). The IEP is carried out by special support teachers with the help of SEN school advisors. KEDDYs might also provide intervention services (e.g. therapies and physiotherapies) to grant the needed specialised support. These programmes are generally offered by special schools.	The Greek Regular Budget and the Public Investment Programme are the sources of funding for the public education system. Funds to local education authorities are allocated by the Ministry of Education based on local needs through the annual ministerial budget. Local education authorities distribute funds to schools and cover additional local expenses. In terms of special education, government and European funds provide the necessary funding in both mainstream and special settings. All students with SEN are given free access to education and support (including diagnosis, counselling and teaching support).	to obtain a general teaching degree. Specialised teachers who work in special classes, special schools or in KEDDYs must I) hold a special education degree; II) a mainstream education degree with a focus on special education (e.g. a PhD in special education, post-graduate studies/ trainings in school psychology) or III) have at least five years of previous experience in special education settings on top of a bachelor's degree. The Institute of Educational Policy (that advises the Ministry of Education on schooling matters) organises and co-ordinates trainings for teachers with no SEN background but working in special education units. Assistance by regional SEN advisors or KEDDYs is available for teachers who need information and advice to address students with SEN.
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			Law 4386/2016 (Art. 82) includes the possibility for mainstream schools to carry out co-education programmes to strengthen awareness of human rights, diversity, respect, dignity, and integration among students without SEN.		
Ireland	Education Act (1998); Equal Status Act (2000); Data Protection Acts (1988 and 2003); Equality Act (2004); Education (Welfare) Act (2000); Education for Persons with Special Educational Needs (EPSEN) Act (2004); Disability Act (2005); Circular Letter 0045/2019	The EPSEN Act identifies special education needs as a "restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition". SEN can arise from four spheres of disability, namely physical, sensory, learning, mental health disability, or from any other condition affecting the student's schooling in a way that creates different results to those for a student without that condition. A student can have a disability without having SEN, requiring additional support in school.	There are different enrolment options: I) mainstream classes with specialised support from additional teaching support and/or resources when needed; II) special classes in a mainstream school with lower student-teacher ratios according to the type of disability; III) special schools with lower student-teacher ratios depending on the disability type (e.g., a special class for children with autistic spectrum disorder has one teacher for every six students).	The State is the main financier for mainstream and special school settings. In terms of special education, it provides additional support for students with SEN through grants covering transport, learning and teaching support, SEN assistance, special schools, SEN equipment and material.	The Department of Education and Skills is in charge of supporting the development of a national framework on teachers' continuous professional development through its Teacher Education division. Continuous professional development programmes include training within the education departments of colleges and universities as well as trainings provided by the Special Education Support Service. The Irish Department of Education and Skills offers post-graduate programmes in special education and learning support for practicing teachers. Various Master's degrees in SEN are offered in the country.
Italy	Law 118/1971; Law 517/1977; Law 104/1992; Framework Law 328/2000; Law 53/2003, Law 170/2010, MIUR Directive 27/12/2012; Law 128/2013, Law 107/2015	Special education needs are diversified in three clusters: disabilities, specific learning impairments and other special education needs (which include also strong linguistic and/or cultural needs).	Italian Law reinforces the need for the personalisation and individualisation of the curriculum in mainstream settings. The Italian system has a strong one-track approach: I) Students with specific learning impairments certified by the National Health Service or private specialists receive a personalised learning programme without being followed by a support teacher. II) Students with disabilities certified by the National Health Service are supported by a special teacher and receive an IEP. III) Students with other special education needs (e.g. strong linguistic and/or cultural needs marked by the school staff and/or social services), are supported with a personalised learning plan (PDP). The Italian education framework also provides access to education to hospitalised children.	The Italian school system is financed with resources coming from national, regional and local authorities. The Italian State provides additional funds for students with SEN aimed at strengthening teacher training, and the inclusion and use of assistive technology among students with SEN. Municipalities cover the support needed for students with SEN to attend mainstream schools. Law 107/2015 includes measures such as mandatory continuous professional development on inclusive education for teachers and school staff. Further financial support and funds are provided by the Department of Social Affairs, the Ministry of Health and local authorities.	Law 128/2013 introduces the principle of mandatory professional development on SEN for all school staff, further reinforced by Law 107/2015 on in-service teacher training on issues such as inclusion in the classroom. The training programmes are designed by the Ministry of Education, University and Research (MIUR) and schools themselves. Early risk identification, didactic measures for the inclusion of students with SEN in the classroom (for students with and without SEN) and teaching guidance are among the topics of the compulsory training. The latter can also see the co-participation of other societal actors (e.g. local health authorities, universities, local organisations).

					The MIUR has Territorial Support Centres (CTS), a network of schools focusing on SEN, providing teachers and resources necessary to include students with SEN in mainstream schools. CTS work on a peer-to-peer approach to share practices and support other teachers at addressing SEN and providing schools with AT.
Japan	School Education Act (amended in 2006); School Education Law (2007); Basic Act for Persons with Disabilities (2011); Act for Eliminating Discrimination against Persons with Disabilities (2013)	The definition of SEN includes visual and hearing impairments, learning disabilities, attention deficit hyperactivity disorder and high-functioning autism.	According to Japan's National Institute of Special Needs Education (NISE), the vast majority of students with SEN receive support within mainstream schools. There are three SEN assistance methodologies in public schools based on the intensity of the condition: I) the lowest-need group attends mainstream classes and is taught through team- and small-group teaching techniques; II) resource rooms in mainstream schools that provide individual or group lessons to students with moderate SEN for several hours per week; III) special classes within mainstream schools. Each school (from kindergarten to high school) has a SEN co-ordinator and requires a comprehensive SEN certificate system. Additional support provided to students with SEN by schools include external advisors and IEPs.	The Ministry of Education, Culture, Sports, Science and Technology (MEXT) directly funds national education institutions, such as universities and public and private institutions at municipality and prefecture levels. Each prefecture has an education board co-ordinating the prefecture education system including special schools. Private institutions contribute greatly to education funding. A main financing scheme provided by MEXT for special education is the Promotional Programme for School Enrolment on Special Needs Education. The programme financially supports the families of students with SEN by providing subsidies for textbooks, transportation and accommodation.	Student teachers in primary or secondary education must attend courses on special support education. Teachers can also obtain a degree for Special Support Schools. Courses for special support teachers are provided for teachers to work with students with SEN in special support schools, elementary schools and high schools. Special education teachers receive the training necessary to support the development and growth of students with SEN in inclusive settings.
Korea	Education Promotion Act (1977); Act on Special Education for the Disabled Persons etc. (2008); Law No.13-1 (2011)	SEN include visual/hearing impairments, mental disorders, physical disability, emotional behavioural disorders, learning disabilities, speech-language impairments (communication disorders), health impairments and development delays.	The 2008 Act addresses the responsibility of central and local governments to provide education for students with SEN across different school levels and support inclusion in society. According to the law, there must be at least one school in each province providing specialised support to students with SEN. In many cases, students with SEN attend mainstream schools either by being enrolled part time in special classes or full time in mainstream classes. Part-time special classes are designed to support inclusive education for students with SEN in mainstream classes. The curricula for students with SEN are based on the standard national curriculum that can be subjected to modifications and adaptations when needed. Students who are hospitalised long term can access online learning platforms at the hospital.	Special education is funded by the government, whose budget includes training programmes for teachers.	Special education programmes are available to train special education teachers (from kindergarten to high school), researchers and professors in the field of special education. The degree in special education allows teachers to undertake subsequent studies and professional training in social and counselling services for SEN.

Netherlands	Amendments to the Primary Education Act (1985) and the Secondary Education Act (1998); Childcare Act (2005); Equal Treatment by Virtue of Disability and Chronic Illness Act (2007); Act on Quality of (Secondary) Special Education (2012/2013); Appropriate Education Act (2014); Education that Fits policy	Four main clusters of students are eligible for special education. These are: 1) students with blindness or visual impairments, 2) students with deafness, hearing impairments or speech-development disorders, 3) students with motor disabilities, long-term illness or mental disabilities, 4) children with mental or behavioural disorders.	The Ministry of Education, Culture and Science sets objectives and standards that primary, secondary and special education schools need to meet in their educational offer. Along the Dutch principle of Freedom of education, schools can decide how to translate such standards into their settings. With the Education that Fits policy, regional school alliances between mainstream and special schools were created to provide individualised support to students with SEN within mainstream settings to the extent possible. Students receive a declaration of admission to special education based on a multi-disciplinary team of experts and, once enrolled in the school, receive an individual education plan drafted in collaboration with their parents.	With the "Education that Fits" policy, primary and secondary school boards have been organised in regional school alliances. The Ministry of Education provides them with funding for SEN. These resources are then channeled to individual schools based on the student ratio per school/school board. Special and mainstream schools can apply for additional funding.	ITE often has an introduction to teaching students with SEN as well as optional courses on SEN. Most teachers working in special education receive training courses with different specialisation courses. An increasing number of mainstream teachers also have a Master's in SEN. Teachers' Agenda 2013-2020 is a national programme that envisions all teachers possessing the requirements to respond to individual students' needs. Teachers can get scholarships that can also be used to obtain, among others, a Master's in SEN.
New Zealand	Education Act - Section 8 (1989) and subsequent Education Amendment Acts; Human Rights Act (1993); The New Zealand Disability Strategy - Making a World of Difference (2001)	SEN include sensory difficulties, learning/communication delays, social and/or emotional and/or behavioural difficulties, and giftedness. Students who are hospitalised can access education provision at the hospital.	Support for students with SEN is adapted to individual students' needs. Each student with SEN receives an IEP co-designed by parents, the whanau ¹⁰ and the student. It determines resources, AT, teaching and home learning support, guidelines for parents and the whanau, and tools to check the student's progress. Some of the teaching and staff providing support to students with SEN are: I) <i>Resource Teachers: Learning and Behaviour</i> , trained to support and work within schools to respond to the needs of students with moderate learning and/or behaviour difficulties. II) <i>Resource Teachers: Literacy</i> to respond to the needs of students with reading and writing difficulties. Their support is not limited to students with SEN, but also extended to the wider classroom if needed, as part of the National Literacy and Numeracy Strategy. III) <i>Advisors on Deaf Children, Itinerant Teachers of the Deaf and Itinerant Resource Teachers of the Visually Impaired</i> to support students with moderate vision/hearing impairments. IV) The Physical Disability Service provides physiotherapists and occupational therapists to provide within-school support to students with physical disabilities.	The Ministry of Education provides the Special Education Grant (SEG) to state schools to carry out Special Education programmes. On top of SEG, schools are also provided with school-based resource teachers. Funding available for students with SEN, their families and schools include funding for equipment and assistive technology, school property modifications to ensure accessibility, support by teaching resources and home or hospital support for students who cannot access schooling settings due to prolonged health issues.	Special education teachers must hold an initial teaching qualification and a postgraduate specialisation in SEN.

¹⁰ See footnote 8.

Norway	Education Act (1998) and subsequent amendments; Kindergarten Act (2005)	Students who do not benefit or are unable to benefit satisfactorily from ordinary teaching have the right to special education (Section 5-1, Education Act).	<p>Expert SEN assessment is necessary before choosing the kind of SEN support to be provided. Parents and guardians can ask for an assessment of the student's SEN, whereas teachers have to notify the school principal if they consider that a student may have SEN.</p> <p>At primary and lower-secondary levels, education for students with SEN is mainly included within mainstream settings with different options: I) mainstream classes; II) mainstream classes with special support and/or resources; and III) special education with teaching based on individual teaching programmes and on expert assessments. There is also the possibility of enrolling students in special settings (special schools or school units within mainstream schools).</p> <p>Each municipality and county have an educational and psychological counselling service to support the inclusion of students with SEN in school (Section 5-6, Education Act).</p> <p>Students with SEN can have individual curricula with identified objectives and outcomes for their learning. Every half academic year the school has to send a report on the student's learning development to the parents/guardians.</p>	Compulsory education is free in Norway as well as all needed learning material for all students. Financing for families with children with SEN is provided by social services.	Since 2017, teacher education has been included in a five-year degree programme; continuous professional development in SEN is offered to teachers.
Portugal	Decree-Law No. 20/2006; Law No. 46/2006; Decree-Law No. 3/2008; Decree-Law no 54/2008; Law No. 85/2009; Decree No. 6173/2016; Decree-Law No. 55/2018	Decree-Law No. 55/2018, moves away from the categorisation of students, including condition-specific labels for students with SEN. It removes special legislation frameworks for students with SEN from the educational system.	Students with SEN are included in mainstream schools, which are supported by a network of 25 Information and Communication Technology Resource Centres (CRTICs). These CRTICs are located in schools across the country and individually support large groups of schools and education settings. They receive annual national guidelines and plans to carry out their activities. They support the inclusion of students with SEN also by providing training to teachers and family and supporting partnerships with local communities.	<p>There has been an increasing decentralisation of the education system, with greater involvement of municipalities and school autonomy. Portugal's education budget covers all students and includes specific funding for students with SEN.</p> <p>The National Early Childhood Intervention System (NEICS) is under the shared responsibility of the Ministries of Education, Health, and Labour, Solidarity and Social Security. Its local intervention units involve educators (Ministry of Education), doctors, therapists and nurses (Ministry of Health), and therapists and psychologists (Ministry of Labour, Solidarity and Social Security). The Ministry of Education has the responsibility of ensuring the allocation of special teachers and staff to mainstream schools.</p> <p>Special units in mainstream schools receive monthly operational allowances. Additional funding provided by the Ministry of Education is channelled into the partnership between mainstream schools and CRTICs. Students with SEN are supported financially to attend and complete compulsory education. The funding mechanism for students with SEN is not dependent on specific types of disability/SEN categories.</p>	Pre-primary, primary and secondary education teachers can specialise in different areas such as SEN, pedagogical support, curriculum development and school counselling. Training in these areas includes one- or two-year higher education courses equivalent to post-graduate degrees.

Spain	Act on the Improvement of the Quality of Education (LOMCE, 2013)	LOMCE defines five clusters of SEN: I) students with physical, intellectual, sensorial disabilities/serious behavioural disorders; II) high-ability students; III) late entries into the Spanish education system; IV) students with specific learning impairments; and V) students with attention deficit hyperactivity disorders. Specialised support can be temporary or prolonged.	There are different possibilities of enrolment depending on individual students' SEN. These range between mainstream classes, special classes in mainstream schools and special schools. Special schools are to be chosen only when a student's SEN cannot be met with specialised support in mainstream settings. Students' SEN must be assessed by expert diagnosis. Based on such assessment, the Education Administrators are in charge of setting out the conditions and methodologies to provide education to students with SEN. Students with SEN can receive a personalised curriculum.	Public education expenditure is financed by the National Budget and Autonomous communities. Public funds account for around 80% of Spanish education spending; the remaining 20% is provided by private funds. National SEN budget covers staff, operational, equipment expenses, grants to NGOs and private schools, school canteens, financial support for mainstream schools that have students with SEN enrolled, transportation, and building maintenance and construction. Autonomous communities allocate SEN budget in a similar manner.	All student teachers must complete a basic course in special education. Primary school teachers can specialise in different topics such as SEN and speech therapy with theoretical and practical training.
Sweden	Education Act (1995); Swedish Education Act (2010); Curriculum for the Preschool Lpfö (1998 revised in 2010); Curriculum for the compulsory school, pre-school class and the recreation centre (2011); Curriculum for the upper secondary school (2013 revised in 2018); Discrimination Act (2017)	There is no legal definition of SEN. Sweden puts emphasis on education for all without categorising students with SEN into defined clusters. Support should be given to students with difficulties in completing their education successfully.	The National Agency for Special Needs Education and Schools manages three national and five regional special schools. National special schools provide education for students with visual impairments with further co-morbidities, students with severe speech and language disorders, and students with hearing impairments with additional learning difficulties. Each student with SEN receives an action plan designed to address their specific needs following an expert assessment. The plan must include information on the student's SEN, measures to support them, curriculum modifications and adaptations.	The central government and municipalities share the responsibility for providing personal assistance and assistance benefits to students with SEN. Sweden's National Agency for Special Needs Education and Schools provides support to students with SEN, education in specialised settings, learning material and funding. Funding for students with SEN is granted by the Social Insurance Administration, which set as a threshold for receiving SEN assistance a minimum of 20 hours support required weekly. If the number of hours of needed assistance is lower, the decision and allocation of assistance is shifted to the municipal level. There are non-negligible differences across municipalities in terms of conditions for and allocation of funding. Several municipalities do not have a precise financing scheme. Volume-based costing and additional resources are often used, which can be calculated on input and throughput models. They can be based on the assessment of individual students' SEN or on school-level socio-economic conditions.	Special teachers obtain a postgraduate diploma in SEN training, through which teachers can specialise in fields such as hearing, visual and language impairments, learning disabilities and deafness.

<p>United Kingdom</p> <p>Education systems are under the responsibility of each UK constituent country</p>	<p>UK (England): Education Act (1996); Childcare Act (2006); Equality Act (2010); Children and Families Act (2014)</p>	<p>The Education Act states that students are eligible for SEN support if they have a learning difficulty requiring special education provision and if they have a significant greater difficulty in learning than the majority of their peers.</p> <p>The Education Act also affirms that a student cannot be considered as having a learning difficulty based on the single fact that the language of teaching is not the same as the one spoken at home.</p>	<p>Students with SEN should be included in mainstream schools with adequate special support. If a student's SEN are not met within a mainstream setting, the local authority is responsible for providing the funds necessary for a student to attend a special school or learn at home. A step-by-step approach is adopted to meet students' individual SEN according to the Special Educational Needs Code of Practice. All mainstream schools are required to choose a qualified teacher for the role of special education needs co-ordinator (SENCo), in charge of providing professional guidance to other teachers and enhancing co-operation among school staff, parents/guardians and community-based services.</p>	<p>The Department of Education allocates a Dedicated School Grant (DSG) to each local authority. This represents the main source of funding for SEN. Through a local school forum, each local authority distributes funds across local schools, based on the local financing scheme. Local authorities also decide the amount of financial resources to be allocated to independent special schools and aid directly provided to individual students with severe SEN. The financial resources allocated to schools by local authorities contain an additional budget to support students with SEN both for mainstream and special schools. Furthermore, additional resources can be allocated by local authorities to schools with a high number of students with SEN. The final decision on how to spend SEN funding provided to schools is the responsibility of school principals and teachers. Funding for students with severe SEN covers students until they are 24 years old.</p> <p>The National Scholarship Fund for Teachers provides financial subsidies for teachers to obtain post-graduate certificates in SEN either individually or in groups.</p>	<p>To improve access to professional training in SEN, the government has provided materials on its online portal. This online training is composed of five specialist modules (autism spectrum disorders; dyslexia/specific learning difficulties; speech, language and communication difficulties; behavioural, emotional and social difficulties; and moderate learning difficulties).</p> <p>The online portal also provides a resource library for teaching students with SEN in mainstream schools and training on more complex and severe SEN.</p>
<p>United States</p>	<p>Rehabilitation Act (1973); Americans with Disabilities Act (1990); Elementary and Secondary Education Act (2001); Individual with Disabilities Education Act (IDEA, reauthorised in 2004 and amended in 2015 through the Every Student Succeeds Act, Public Law 114-95, in 2015)</p>	<p>The following eligibility criteria for SEN support must be met: students must be between 3 and 21 years old, their education performance must be negatively affected by a condition leading to a disability/impairment, and need to receive SEN assistance within the least restrictive environment.</p> <p>According to IDEA, students who have one of 13 types of disabilities may be eligible for special education: specific learning disability, autism spectrum disorder, emotional disturbance, speech/language impairment, visual impairment and blindness, hearing impairment, deafness, orthopaedic impairment, intellectual disability, traumatic brain injury, other health impairments, and multiple disabilities.</p>	<p>Under IDEA, at the local level, school districts are responsible for FAPE, Free Appropriate Education. Students with SEN receive individualised learning programmes. Education can be provided both in mainstream and special settings. More than 90% of students with SEN receive education within mainstream schools and more than 50% are included in the general classroom for at least 80% of their school day.</p>	<p>Under IDEA, there are three main sources of grants. IDEA Part B includes SEN funding from kindergarten to grade 12. Other grants provide financial support for pre-primary school programmes and SEN students' families.</p>	<p>To become a specialised teacher in SEN, a bachelor's degree and a state-issued license or certificate for SEN are required. In terms of state-issued licenses, all states have their own peculiarities and differences.</p>

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