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Development of Inclusive Education Project

Technical Assistance for Increasing the Quality of the Special Education Services for Inclusive Education

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Benchmarking Report

Teacher Continuous Professional Development/
In-Service Training in European Countries

Intervention 0

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Table of Contents

Introduction	2
I. Professional Development of Teachers in Europe (Teacher In-Service Training)	2
II. Teacher Education for Inclusion: The Project of the European Agency for Special Needs and Inclusive Education	5
III. Examples of Teacher Continuous Professional Development in EU member states	9
<i>Finland</i>	9
<i>Italy</i>	13
<i>Ireland</i>	16
<i>Hungary</i>	19
<i>Latvia</i>	23
<i>Additional Information on Certification</i>	26
IV. STEM Education and Teacher Training	27
V. Teaching and Learning International Survey (TALIS)	31
VI. Conclusions	35
References	37



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Development of Inclusive Education Project

Introduction

Education is a very important aspect of every country's economic and societal development. Education provides knowledge, skills and values to the population, as well as shaping the personality of the youth of a nation. Education is very important for an individual's success in life as it has a big impact on the quality of life of a person in the long-term. Education is generally seen as the foundation of society which brings economic wealth, social prosperity and political stability.

To ensure that every learner receives quality education in accordance with their educational needs, the teachers and other pedagogical specialists play a major role in the provision of educational services. This is why, the issue of teacher education is high on the policy agenda across Europe and globally. The World Report on Disability (2011) stresses that: 'The appropriate training of mainstream teachers is crucial if they are to be confident and competent in teaching children with diverse needs' and emphasises the need for this training to be focused upon attitudes and values, not just knowledge and skills (p. 222).

The 2005 OECD report "Teachers Matters" stresses that the demands on schools and teachers are becoming more complex. The report emphasises that society nowadays expects schools to deal effectively with different languages and student backgrounds, to be sensitive to culture and gender issues, to promote tolerance and social cohesion, to respond effectively to disadvantaged students and students with learning or behavioural problems, to use new technologies, and to keep pace with rapidly developing fields of knowledge and approaches to the student assessment. Teachers need to be capable of preparing students for a society and an economy in which they will be expected to be self-directed learners, talented and motivated to keep learning over a lifetime. (p.2)

The UNESCO Policy Guidelines on Inclusion in Education Report (2009) highlights that teacher education programmes have to be reoriented and aligned to inclusive education approach in order to provide teachers the pedagogical capacities which are necessary to make diversity work in the classroom and in line with the reformed curricula where an inclusive curriculum addresses the child's cognitive, emotional, social and creative development. It is based on the four pillars of education for the twenty-first century – learning to know, to do, to be and to live together. (p.17) The way teachers teach is of critical importance in any reform designed to improve inclusion. Teachers must make sure that each pupil understands the instructions and expected working modalities. Similarly, the teacher him/herself must understand the pupil's reaction to what is being taught since teaching is only meaningful and relevant if the pupil acquires its content. Teachers thus need to be educated in line with these expectations. (p.20)

I. Professional Development of Teachers in Europe (Teacher In-Service Training)

The importance of education and, in particular, the role of teachers in the development of all the aspects of the living way of any nation are addressed in numerous documents of the Council of the European Union, the OECD, UNESCO and other international organisations.



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Development of Inclusive Education Project

The European Union in the Council Conclusions (Council of the European Union, 2017) on inclusion in terms of diversity to achieve a high quality of education for all states that there is a need for more support to teachers, educators and other teaching staff to operate successfully in training systems that allow for flexible learning pathways and that respond to the different needs, abilities and capacities of learners. Where appropriate, these learning pathways need to be tailor-made, bottom-up and collaborative. The Council invites all countries to consider a whole school approach encouraging the engagement of the entire school community in the provision of the quality education for all.

The Council Recommendations promoting common values, inclusive education, and the European dimension of teaching (Council of the European Union, 2018) emphasises the importance of the promotion of initial and continued education for educators, exchanges and peer learning and peer counselling activities as well as guidance and mentoring for educational staff.

The OECD Report entitled "In which countries do the most highly qualified and experienced teachers teach in the most difficult schools?" states that: "teachers are the most important school resource. In every country, teachers' salaries and training represent the greatest share of expenditure on education; and this investment in teachers can have significant returns. Research shows that being trained by the best teachers can make a real difference in the learning and life outcomes of otherwise similar students" (OECD, 2018b, p.2).

During the introduction of the World Health Organisation World Report on Disability in New York in June 2011, the director of the European Agency for Special Needs and Inclusive Education Mr. Cor Meijer stressed the importance of teachers with these words: "We can discuss inclusion on many levels: conceptual level, policy level, normative or research level, but in the end, it is the teacher who has to cope with a variety of students in the classroom! It is the teacher who implements the principles of inclusive education. If the teacher is not able to educate a variety of students in the mainstream classroom, all the good intentions for inclusive education are worthless. So, the challenge for the future is to develop curricula and educate teachers in how to cope with diversity" (European Agency for Special Needs and Inclusive education, 2011, p. 5).

In Europe, high-quality teaching is determined to a great extent on the knowledge and skills of teachers, which includes what they know and what they can do. Teachers acquire knowledge and skills in different phases of their professional career starting with initial teacher training which is followed by induction period and mentoring. The continuous professional development (CPD) or in-service training (INSET) gives teachers the opportunity to improve their competencies and adapt them to ever changing educational environment. The support they can receive from colleagues and from professionals in the field of education can help them cope with complex issues and better tackle demanding tasks that arise in schools every day. The Council of European Union in the Conclusions on school development and excellent teaching (2017) highlights the importance of investing in the continuous professional development and growth of teachers during all the phases of their careers. It is noted that CPD needs to be accessible, affordable and relevant. Involving schools and teachers in identifying themes and areas of need can help improving the quality of education.

CPD in Europe may be regarded as mandatory, which means that there is a minimum amount of CPD that all the teachers must participate, but CPD can be considered as one of teachers' statutory duties according to the national regulations, policy documents or employment contracts; or, CPD may be optional for teachers.



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Development of Inclusive Education Project

- CPD has a mandatory status when there is a set of minimum hours, days or credits that all the teachers are obliged to complete.
- CPD is considered to be a professional duty of teachers when it is stated in the regulations or in other relevant policy documents, but the minimum number of the hours is not defined.
- CPD is optional when there is no statutory obligation to participate in CPD.

When looking at European countries concerning primary and secondary education teachers, CPD it could be observed that 21 education system have mandatory CPD. Teachers have to participate in CPD to have a career promotion, as a prerequisite for salary progression or to be able to continue their career as a teacher. In 14 other education systems, participating in CPD is a duty of teachers but no minimum number of hours is envisaged. In 7 countries, there is no statutory obligation for teacher regarding participation in CPD.

Minimum number of mandatory CPD hours, days or credits for the given number of years (2016/2017)

	BE fr	BG	FR	CY	LV	LT	LU	HU	MT	AT	PT	RO	SI	UK- SCT	AL	FY	IS	ME	RS
No of hours/days/credits	3 d	48 h	9 h	10 h	36 h	5 d	16 h	120 h	18 h	15 h	50 h	90 cr	15 d	35 h	6 h	60 h	150 h	24 h	64 h
Time period (years)	1	3	1	1	3	1	1	7	1	1	4	5	3	1	1	3	1	5	1

Source: Eurydice

Although in the half of the countries in Europe there are no statutory regulations about mandatory CPD, it does not mean that teachers do not participate in CPD. In the majority of European countries, schools play an important role when it comes to deciding the needs and priorities for teachers' professional development. In those countries where a CPD plan at school level is compulsory, schools are usually responsible for deciding what training is needed for their teachers. While developing the plan, schools may follow general guidelines and priorities set by the education authorities, or they may consult teachers' themselves, or they act in accordance with the organisations representing teachers. In most cases, CPD is intrinsically linked to the school development plan. In countries where CPD planning at school level is not mandatory, schools also tend to have an active role in defining CPD needs. The role and involvement of schools in planning CPD of teachers vary across countries and are linked to the involvement of other authorities in the process.

There are different authority levels responsible for defining CPD needs and priorities in Europe:

- Top-level educational authorities are responsible for determining CPD needs and priorities, but they can share the responsibility with local institutions and/or schools (i.e. France, Ireland, Latvia);
- Schools contribute to the process of identifying CPD needs and priorities together with top-level education authorities. Schools may be involved in the process in various ways:
 - Top-down approach: while developing their CPD plans, schools follow general guidelines and priorities set by the educational authorities and take their own priorities and needs into account (i.e. Bulgaria, Italy, Cyprus)



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Development of Inclusive Education Project

- Bottom-up approach: there are formal procedures in place so that schools and teachers can convey their needs and priorities to the top-level education authorities (i.e. Spain, Hungary, Malta)
- Two-layer approach: schools can decide on their own CPD priorities and activities in addition to those offered by the relevant education authorities (i.e. Flemish Community of Belgium, Slovenia, Switzerland)
- The process to define CPD needs and priorities involves the top, local and school levels (i.e. Germany, Austria, Portugal, Finland)
- Local authorities and schools are responsible for determining CPD needs and priorities (Denmark, the Netherlands, Sweden)
- Top-level regulations determine that CPD needs and priorities are defined by schools and teachers themselves (i.e. Estonia, Lithuania, Poland).

Teachers' continuous professional development is currently considered as *teachers' learning* which is supposed to be dynamic, ongoing, continuous and set in teachers' daily lives – embedded in the classroom context and constructed through experience and practice, in sustained, interactive cycles of goal setting, planning, practicing and reflecting (Watkins, A. et al, 2016). The in-service training usually focuses on three distinct issues:

- Development of classroom skills;
- Subject knowledge;
- Knowledge of official relevant documentation.

Currently, the everyday life presents many challenges that have a great impact on educational environments. The diversity of needs of students in every classroom demands teachers to be flexible in relation to the implementation of the curricula, to foster equity by catering to the individual needs of every student.

In general, there are no European level reports on in-service or CPD; specifically, on inclusive education or inclusive approach in education. However, every, above mentioned, EU document emphasizes the need of individualization of education services taking into account the needs of every student.

II. Teacher Education for Inclusion: The Project of the European Agency for Special Needs and Inclusive Education

The European Agency for Special Needs and Inclusive Education (European Agency for the Development of the Special Needs Education till 2014) conducted a European level project called Teacher Education for Inclusion (TE4I) which started in 2009 and ended in 2012. The project involved fifty-five experts from 25 countries, including policy makers responsible for teacher education and inclusive education and both general and specialist teacher educators, and is considered one of the most comprehensive ones in relation to teacher education for inclusion in Europe. The project focused on initial teacher training in the member states and provided information on both best practice and challenges encountered by the states. The project recommendations draw on the commonalities between policy and practice for teacher education for inclusion in participating countries, on the policy and literature



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Development of Inclusive Education Project

reviews produced as part of the project and information gathered from a wide range of stakeholders during 14 country study visits.

The main topics discussed during the project were:

- Features of initial teacher education in the member countries of the Agency relating to the different structure of it, entry requirements, representation from the minority groups, content of initial teacher education, organization forms, assessment, approaches to it and attitudes and values in initial teacher education;
- Teaching practice in different higher education institutions in European countries;
- Teacher educators and how their professional development is organized;
- Teacher competences and how initial teacher education provide training to develop these competences and how they are assessed in different countries;
- Different approaches to quality assessment and follow-up of initial teacher education;
- Wider policy framework which is closely related to and supporting initial teacher education – issues concerning the use of terminology, holistic policies to support all learners and accountability which needs attention as the emphasis on high standards of academic attainment can work against, rather than alongside policies for inclusion.

The project also identified the key issues and challenges concerning initial teacher training and they are divided in two groups – those that concern teacher education and those concerning wider policy issues.

The issues and challenges concerning teacher education are defined as follows:

- Recruitment and retention of teachers as there are a number of European countries where it is a problem to fill vacant teaching posts with appropriately qualified staff; teacher recruitment, particularly at the secondary level in mathematics and science is problematic;
- Teacher educators are key players in assuring a high-quality teaching force; yet many European countries have no explicit policy on the competences they should possess or on how they should be selected or trained;
- Partnership with schools is of great importance as much depends on the way that teacher education institutions work with schools;
- Evidence-informed change as the lack of cumulative research and empirical evidence in teacher education has been noted by many international institutions;
- Teacher competences - in addition to subject knowledge teachers need knowledge of child/adolescent development and pedagogical skills – including constructivist approaches, problem-based learning and cooperative learning – approaches that allow them to create choice and opportunity for all learners to access and make sense of information and respond in different ways. Teachers also need to see themselves as lifelong learners. They need to develop skills in research and use of research findings. Interpersonal skills and an understanding of the nature of collaboration are essential to work with others including professionals and parents who contribute to a full understanding of learners' needs

The issues and challenges concerning wider policy are described below:



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Development of Inclusive Education Project

- The issue of terminology - language used about inclusion cannot be divorced from fundamental beliefs about the nature and purpose of education and equity in society;
- Identification of learners – the use of language also impacts the identification of learners with additional support needs and result in considerable differences in processes and procedures, which are often linked to complex funding arrangements;
- Support for all learners - flexible and interactive approaches are needed to support the participation and learning of every learner, allowing all learners to perceive, understand, engage and process information and express themselves in different ways;
- Conflicting agendas - If only a narrow range of 'ability' is valued, then various forms of categorising and labelling are likely to continue, making it difficult to create classrooms where everybody can succeed. Teacher education needs to prepare student teachers to observe learners in non-categorical ways – describing learning processes and outcomes which will not be adequately reflected by tests or checklists, but which more accurately reflect learners' capacities and inform further learning.

A number of recommendations emerged from the project findings. They are directed to professionals working in teacher education, as well as policy makers who need to provide a coherent policy framework for managing the wider, systemic change necessary to make an impact on teacher education for inclusion. These recommendations are:

- *Recruitment and retention:* Effective approaches to improve the recruitment of teacher candidates and increase retention rates should be explored along with ways to increase the number of teachers from diverse backgrounds and with disabilities.
- *Evidence of effectiveness of teacher education:* Research should be undertaken on the effectiveness of different routes into teaching and course organisation, content and pedagogy to best develop the competence of teachers to meet the diverse needs of all learners.
- *Professionalisation of teacher educators:* The 'profession' of teacher educators needs to be further developed with improvements in recruitment, induction and continuing professional development. The profile of teacher educators in Higher Education Institutions (HEIs) and school staff with this responsibility should be raised by the appointment of candidates with appropriate expertise and qualifications. Further work should develop a formal induction process and explore ways to maintain recent, relevant classroom experience for college-based staff.
- *Collaboration between schools and HEIs:* As a major part of all ITE courses, teaching practice needs to be supported by a clear understanding of underpinning theoretical issues to ensure that practice does not focus only on the skills that can be most easily observed and measured. Schools and teacher education institutions must work together to ensure good models in practice schools and appropriate placements for teaching practice.
- *Wider, systemic reform:* Teacher education cannot work in isolation. The 'whole system reform' needed to support change will require commitment and strong leadership from policy makers in all sectors and the full range of stakeholders in education. Further work should focus on the development of policy across sectors and multi-agency practice at all levels to support inclusive education as a key part of a more inclusive society.
- *Clarification of the language that is used when referring to inclusion and diversity:* Categorisation and labelling reinforces comparisons, builds hierarchies and can limit expectations and, as a result, learning. Policy reform should support all teachers and key



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Development of Inclusive Education Project

professionals to develop a clear understanding of the underpinning premises associated with and the implications of using different terminology.

The project TE4I also identified four areas for further policy development.

- Initial teacher education courses should follow a merged model approach: Inclusion and diversity issues are an integral part of content within initial teacher education programmes for all teachers – regardless of the age range or subject they intend to teach.
- A continuum of professional development opportunities on diversity issues should be available for all teachers and school leaders: Following coverage of these issues in initial teacher education and provision of a range of relevant experiences, teachers should be able to follow-up specific areas in greater depth throughout their careers.
- Professional development opportunities on diversity issues should be available for all teacher educators: Increasingly, teacher educators should be appointed who have knowledge and experience of inclusive settings. Research and development opportunities should be available for all teacher educators to encourage collaboration between faculties and contribute to a 'whole institution' approach to diversity.
- Data on the recruitment and retention of teachers, in particular data relating to the representation of teachers from minority groups, should be collected: Such data should be analysed and used to inform policy-making decisions with the aim of ensuring that the teacher workforce is representative of the population as a whole.

In the course of the project, the *Profile of Inclusive Teachers* was developed which is used by many of the European countries in the development of their teacher profession standards including the competencies of the teachers.

In the *Profile of Inclusive Teachers* four core values relating to teaching and learning have been identified as the basis for the work of all teachers in inclusive education. These four core values are:

1. *Valuing learner diversity – learner difference is considered as a resource and an asset to education;*
2. *Supporting all learners – teachers have high expectations for all learners' achievements;*
3. *Working with others – collaboration and teamwork are essential approaches for all teachers;*
4. *Continuing personal professional development – teaching is a learning activity and teachers take responsibility for their own lifelong learning. (European Agency, 2012)*

The *Profile* also defines the three elements which constitute the competence. These three elements are: attitudes, knowledge and skills. It is understood that: "a certain attitude or belief demands certain knowledge or level of understanding and then skills in order to implement this knowledge in a practical situation" (European Agency, 2012).

Every core value in the *Profile* has the areas of competences which are described in relation to the mentioned three elements. The *Profile* text was intended for policy makers and practitioners to develop and make changes as needed.

The project focused on general education, teacher initial education and how they are prepared to be inclusive during this period. The *Profile of Inclusive Teachers* was developed as a guide for the design



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Development of Inclusive Education Project

and implementation of initial teacher education programs for all teachers. It was not prepared as a script for initial teacher education content, but rather it was considered as stimulus material for identifying relevant content, planning methods and specifying desired learning outcomes for initial teacher education. But the *Profile* could be used for other purposes – for students as a tool for self-reflection, for student educators as basis for discussions, for practicing teachers as a guide for defining priorities on continuous professional development, for school leaders on planning teacher professional development which is linked to the whole school development.

As stated above, the project TE4I was about the initial teacher education and what approaches and strategies have to be implemented to prepare all teachers to work in heterogeneous classrooms with students with diverse educational needs. At the end of the project, it was concluded that initial teacher education is only the first phase in preparing teachers to be inclusive as teachers are life-long learners and every school should be a learning organization.

During the years after the end of the project TE4I, the discussions about the importance of education and the significant role of the teachers in the changing world have been very intensive. After the survey on the priorities of the Agency member countries in 2017, the decision on conducting a new project on teacher education was taken by the Agency by depending on the results of the TE4I but this time, the aim was to evaluate the topic on how to prepare all teacher to work with all students in mainstream classrooms. The aim of the new project is to develop a comprehensive policy framework for teachers' professional learning for inclusion. The teachers' professional learning, in the context of the project, includes initial teacher education, induction, continuous professional development (CPD) and in-school learning opportunities. (European Agency, 2019, in print).

III. Examples of Teacher Continuous Professional Development in EU member states

The chosen examples for CPD in European countries (EACEA National Policies platform) show that there could be different status and planning procedures as well as different authority levels involved in defining the needs and priorities of CDP but in all the countries, the needs of teachers and schools are taken into account when deciding on what the resources are spent. There are no specific regulations on requirements for in-service training related to inclusive education. A that kind of a CPD have the same requirements as any other programs.

Finland

In Finland, there is no special legislation governing continuous professional development for teacher. Teachers are obligated to participate in (CPD) training for one or five days a year according to the relevant statutes and collective agreements with the employer, which is the local municipality in Finland. Teachers have the right to participate in this obligatory training with full salary benefits. On the other hand, employers have the right to assign all full-time teachers to the training. Employers also decide which training programmes and forms of education can be accepted as CPD training in line with the collective agreement.



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Development of Inclusive Education Project

The primary responsibility for CPD lies in the education providers. Today, teachers' themselves have been given greater responsibility for developing their professional skills and expertise. More and more attention is paid to self-motivated continuing education and training and local municipalities support it within their financial limits and together with financial support from the State.

The State is primarily responsible for funding continuing education that is important for implementing education policy and which promotes the aims of this policy. Most of the funding for the CPD goes through the Finnish National Agency for Education and the Regional State Administrative Agencies. The Ministry of Education and Culture of Finland appointed a *Teacher education forum* for the term 2016-2018 to support the development of both pre-service and in-service training for teachers. In March 2019, a new Teacher Education Forum was set up to continue the work on teacher education reform, to promote the goals of the Teacher Education Development Program, and to support teacher education development projects. The objective of the Teacher Education Development Programme is that a systematic and coherent structure will be adopted in the development of teachers' competences during their careers. It is considered important that each teacher has a possibility for competence development throughout his or her career. The programme aims to secure this possibility for every teacher. Particular attention has been paid to building up the vocational skills of young teachers and their possibilities of receiving support.

The Government of Finland has decided that its projects, including the development of teacher education, must be strongly based on research, as research is the only sensible basis for long-term development. The projects take advantage of existing research on teacher education and teachers' competences, cooperate with national and international researchers, and analyse the feedback and material collected during the project to discover the effects of the projects' development measures.

It is understood that the development projects will promote cooperation and community in teacher education among teacher educators, teacher students, working teachers, schools, municipalities and other interest groups. Research-based development projects provide teachers with excellent opportunities to participate, learn and develop professionally.

CPD is largely based on the logic of supply and demand. It is divided into the following forms on the basis of the responsible decision-making bodies:

- Self-motivated CPD,
- Employer-funded CPD,
- State-funded CPD which is linked to education policy and priorities.

CPD is considered the responsibility of both the teachers themselves and their employers. Teachers have the responsibility and power to take decision for participating in the education and they may receive support from society in the form of various study grants.

Employer-funded CPD is funded by the employer and takes place during working hours. This type of CPD can be for individual teachers or for the whole teaching personnel in a school or municipality.



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Development of Inclusive Education Project

Education that is important in terms of education policy and priorities is funded by the State. The budget for CPD for education personnel is allocated through a tendering process administered by the Finnish National Agency for Education. Universities, polytechnics, special needs institutions, teacher training schools and other institutions that have the required special expertise in the field of education and training can apply for these funds.

The state funded CPD for 2019 focuses on the following themes:

- Developing school cultures;
- Pedagogy, subject-specific and vocational competences;
- Well-being and support for learning;
- Language and cultural diversity;
- Digitalisation and ICT.

As could be understood from the above listed themes of state funded CPD, the majority of them concerns diversity and inclusive approach in terms of teaching and learning. The new core curriculum of Finland was adopted in 2014 where the leading principle of the Finnish educational thinking was described as provision of equal and high-quality education in the best way to respect children and childhood, and to build a sustainable future for both individuals and the whole country. The purpose of education is to promote life-long and life-wide learning, holistic development and well-being of all learners, as well as improving their skills for living in a sustainable way. To promote equity and equality by providing equal access to education for everyone, by encouraging and supporting every student's learning and well-being as well as by ensuring, by means of high-quality support systems, that everyone has opportunities to be successful in learning, every teacher has to implement inclusive education. The teachers have to be life-long learners for realising these.

For example, Valteri Centre for Learning and Consulting which is one of the national centres which operates under the Finnish National Agency for Education provides the following topics for CPD: methods and operating models for solving everyday learning situations; up-to-date professional knowledge for personnel in the education and teaching sector; common consideration and solutions for developing flexible and diverse learning support for everyone in a comprehensive school.

Participation in CPD activities does not provide teachers with formal benefits such as salary increases or promotions. A part of the CPD is compulsory, but there is information that shows that teachers participate in CPD much more than formally required. It is understood that the main motivation for them is professional development, updating and renewing their own knowledge and competences as well as professional well-being.

Inclusive Education and Special Needs

Finland offers equal learning opportunities for all children. Support actions are provided to every child who needs them. A cooperation between a team of professionals is ensured to make every student's lifelong learning and inclusion possible. Special educators, classroom teachers and education assistants work closely together in Finnish schools. The support actions are provided for students with varying



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Development of Inclusive Education Project

needs as support may be necessary due to mental, physical, behavioural, cultural, linguistic or other reasons. Gifted pupils and students might also need special support for their studies.

The new systematic way of organising support has been implemented nationwide since 2010 in pre-primary and basic education. In the Core Curriculum adopted in 2014 the Chapter 7: Support in Learning and School Attendance it is stated that there are three levels of support for learning and school attendance. The focus is on providing support as early as possible in order to prevent the emergence and growth of problems. Support for growth, learning and school attendance is shaped into the following categories:

- general support;
- intensified support;
- special support.

Everyone is entitled to general support. It is a natural part of everyday teaching and the learning process. If general support is not enough, pedagogical assessment is carried out and a plan for intensified support is prepared. Following this, a learning plan is drawn up for the learner.

If intensified support is not enough, the student undergoes further, more extensive pedagogical statements. The education provider collects information from teachers and other professionals. Based on this information, the education provider makes an official decision concerning special support. Following this decision, an individual education plan is drawn up for the student. Intensified support and special support are based on careful assessment and long-term planning in multi-professional teams, using individual learning plans for pupils.

Support forms include remedial teaching, part-time special needs education, interpretation and assistance services and special aids. These support forms may be used at all three levels of support, both separately and to complement each other. The support received by the pupil must be flexible, based on long-term planning, and adjustable as the student's needs for support change. Support is provided for as long as necessary, and at the level and in the form indicated by the student's needs.

The Core Curriculum states that the organisation of instruction and support is based on the strengths as well as the learning and development needs of each student and teaching group. Attention is paid to the accessibility of learning and the prevention and early recognition of learning difficulties. Support for learning and school attendance comprises communal and learning environment related solutions and meeting the students' individual needs.

Finnish educational legislation does not categorise pupils according to disabilities or support needs. As mentioned above, when planning the level of support (general, intensified or special) for a pupil the support needs are assessed. The need may vary from temporary to continuous, from minor to major, or from one to several forms of support. The parents are responsible for choosing the school their child attends.

Number of students in different educational settings in Finland (academic year 2016/2017)¹



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Development of Inclusive Education Project

	Total number of students	Total number of students with SEN	Students with SEN in mainstream	Students with SEN in special classes	Students with SEN in special schools
ISCED 1	359 635	23 948	8670	13 120	2158
ISCED 2	177 274	16 027	6913	7356	1758
ISCED 3	165 247	24 355	N/A ²	N/A	N/A
Total No	702 156	64 330			

¹Data collected by the European Agency for Special Needs and Inclusive Education

²Data not available

According to the data in the table 9% of all students have officially issued statements about their special educational needs. No information is gathered about the educational environment of students with SEN in upper secondary school (ISCED 3).

Italy

The law on the reform of the education system numbered 107/2015 established that continuous professional development (CPD) for teachers, is compulsory, continuing and structural. The collective labour contract for school staff establishes that CPD is both a right and a professional duty for teachers.

According to the law, each school defines its CPD activities, also establishing networks with other schools in their territory. Every school in Italy has to develop a three-year plan which combines the school and teachers' individual needs with national priorities indicated by the Ministry of Education in the National Training Plan published every three years regarding the development of systemic skills (e.g. school autonomy, evaluation, innovative teaching), 21st century skills (e.g. foreign languages, digital skills, school-based and work-based learning) and skills for inclusive learning.

For the three-year period of 2016-2019, the Ministry of Education of Italy has established the following priorities:

- Foreign languages;
- Digital competences and new learning environments;
- School and work;
- Autonomy;
- Evaluation and improvement;
- Competence-based teaching and innovative teaching methods;
- Integration, civic competences and global citizenship;
- Inclusion and disability;
- Social cohesion and prevention of youth discomfort.

Some of the specific topics that teachers have in their in-service training concerning students with special educational needs are early risk identification, didactic measures to be adopted both with students and with the class group, assessment procedures and guidance.

Training initiatives are generally not part of the teaching timetable and teachers have the right to participate since CPD contributes to the development of their professional life. Furthermore, teachers



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Development of Inclusive Education Project

have the right to have five days with exemption from service during the school year to participate in training initiatives.

In order to help teachers in their CPD activities, the law numbered 107/2015 foresees a financial support delivered in the form of an electronic card. The card is personal and not transferable and is destined to permanent full-time and part-time teachers working in state schools, included teachers in their induction period. The Ministry of Education and the Ministry of Finance have defined the criteria and methods for the attribution of the card. Every year, each teacher receives a maximum of 500 € for:

- Purchasing books, magazines, hardware and software;
- Attending courses offered by accredited bodies or by higher education institutions;
- Attending cultural events (representations, movies, live events) and visit museums and exhibitions;
- Carrying out activities which is consistent with the three-year educational plan of the school and with the National Training Plan.

The sum is not considered an ancillary retribution and it is not taxable. Within the end of August of each year, teachers must send the statement of expenses for CPD activities to their school administration that make them available to auditors.

Inclusive Education and Special Needs

Inclusion for students with disabilities began with Law 118/1971, which granted all children the right to be educated in common classes, and with Law 517/1977, which abolished special schools.

Students with disabilities have the right to attend mainstream classes with appropriate teaching support. They have the right to full participation in school life, such as summer camps, study visits (accompanied by special staff), etc. According to their disability, children may have assistants provided by local authorities. Students have the right to an individual education plan (drafted by family and schools), to a social project (drafted by social assistants and experts from the local health board), to a rehabilitation programme tailored to their individual needs and to vocational guidance.

The principle of inclusion and the right of students with disabilities to receive specific support are also included in the legislation that regulates general aspects of the education system, such as enrolment, class size and student assessment, as well as initial teacher education and support teacher training.

The Italian government adopted the Good School (La Buona Scuola) reform of the national education and training system in July 2015. This reform sets out changes in education and training provision management and in the curricula. This reform aims to affirm the school's central role in society and raise all learners' levels of education and skills, based on individual learning times and styles. This will counteract inequalities, prevent school drop-out and create open schools as permanent labs for research, experimentation, educational innovation, participation and education for active citizenship. It will also guarantee the lifelong right to study, equal opportunities and achievement.



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Development of Inclusive Education Project

Students with disabilities generally attend mainstream schools, in the ordinary sections and classes at all educational levels. During enrolment, parents must submit the specific certification issued by the relevant office after the mandatory disability identification procedures have been completed. Such documentation certifies the type of disability and the right to receive specific support.

Based on the above-mentioned certification, the following documents are drawn up:

- Functional diagnosis: the local health authority draws this up. It provides an analytical description of the student's psycho-physical conditions and his/her potential.
- Dynamic-functional profile: the local health authority and curricular and support teachers draw this up jointly. It includes diagnostic elements related to difficulties a student encounters in his/her school activities, but above all his/her potential and development possibilities in the short and medium term.
- Individual education plan: this is drawn up jointly by the local health authority, curricular and support teachers, educators or education assistants (if required), in collaboration with parents. It includes a description of the interventions planned for the student in a given period.

Schools must remove all barriers and offer all facilities (as well as the use of information and communications technology) in the most functional manner suited to each student's needs.

Classes with one or two students with disabilities usually contain a maximum of 20 students. The inclusion process is supported by a project which defines strategies and methods adopted jointly by curricular and support teachers, together with the school staff.

Support teachers are part of the team of regular class teachers and participate in all the planning and assessment activities. Support teachers also facilitate all inclusion processes.

In Italy legislation identifies three broad categories of special educational needs:

- Disabilities;
- Specific developmental disorders (including specific learning disorders);
- Socio-economic, linguistic and cultural disadvantage.

No specific categories of special educational needs are reflected in the legislation. The parents have the right to choose the school their child attends.

Number of students in different educational settings in Italy (academic year 2016/2017)³

	Total number of students	Total number of students with SEN	Students with SEN in mainstream	Students with SEN in special classes	Students with SEN in special schools
ISCED 1	2 792 414	90 845	89 628	N/A ⁴	1217
ISCED 2	1 729 226	69 470	69 279	N/A	191
ISCED 3	2 664 967	65 913	65 699	N/A	214
Total No	7 186 607	226 228			

³Data collected by the European Agency for Special Needs and Inclusive Education

⁴Data not available



This project is co-financed by
the European Union and the Republic of Turkey.



Development of Inclusive Education Project

According to the above presented data 3% of all students have officially issued statements about their special educational needs. There are no special classes for students with SEN in Italy.

Ireland

A national network of Education Centres is supported, and appropriate groups, bodies and institutions are empowered to design, develop and deliver Continuous Professional development (CPD) programmes from which teachers can select the courses appropriate to their needs. While it is not yet mandatory for teachers to attend CPD events run by these bodies, they are encouraged to attend and there is no charge for events provided by the Department of Education and Skills funded support services.

As well as focusing on curriculum changes, continuous professional development programmes for teachers provide support for teachers and schools across a range of other areas including teaching methodologies, special educational needs, literacy and numeracy, leadership development, induction, substance misuse prevention, child protection, school self-evaluation and curricular support. Teachers can access these supports by responding to invitations from service providers, by identifying areas for support and requesting same through their school principal, or by using telephone or online support where available.

On 20th March 2017, three support services:

- Special Education Support Service (SESS);
- National Behaviour Support Service (NBSS);
- Visiting Teacher Service for Children who are Deaf/Hard of Hearing and Children who are Blind/Visually Impaired (VTHVI);

transferred from the Department of Education and Skills to the National Council for Special Education (NCSE) and joined with the services which are already being provided by NCSE to form a new NCSE Support Service. This new service aims to develop schools' capacity to include students with special educational needs and to promote a continuum of educational provision which is inclusive and responsive.

From March 2017, the NCSE has responsibility for:

- Providing CPD and support for teachers in the area of special education needs to enhance the quality of learning and teaching in relation to the provision of special education;
- Providing support and expertise to partner schools on issues related to behaviour;
- Supporting the introduction of the new model of resource teaching allocation to schools and to develop capacity to meet the needs of students with special educational needs.

At present, the *Summer Course Programme* is a very substantial element in the professional development of primary teachers. The summer courses provided are wide-ranging and include professional development opportunities for teachers in topics related to each curriculum area, special education, teaching approaches and methodologies, and many aspects of school organisation, management and leadership.



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Development of Inclusive Education Project

The Teacher Education Section (TES) in the Department of Education and Skills determines priorities in the allocation of available State funds for in-service development and the methods of delivery. TES coordinates the resourcing of state provision for teacher education for primary and post-primary teachers at local and national level.

There is a great range of curriculum variations in the types of CPD, in line with the needs of a fast-changing education system. School curriculum reform has been and continues to be a core concern of the professional development activities which are provided. The duration of courses varies a great deal linked to the theme, purpose and outcomes of the provision. Many courses are of relatively short duration such as 2/3 hour, one-day, three-day, one week. Others are conducted over a longer period and can sometimes be punctuated over time. Many courses have no formal credits or certification attached to them. Their purpose is to update, re-skill, and re-energise teachers. Increasingly, there is an emphasis on school based CPD, and the cultivation of a cluster approach between staff in local schools.

Teacher CPD is mainly voluntary, providing for teachers who wish to up-skill and keep their skill set up to date. Where there is a curriculum change which necessitates CPD, it may be viewed as mandatory although teachers cannot be directed to attend. Travel and subsistence are reimbursed according to Department rates and substitution may be provided depending on the course. Certificates of attendance are provided in most cases, for example, to newly qualified teachers for attendance at workshops and also to primary teachers who attend 20-hour summer courses.

The examples of topics for CPD which is provided by the NCSE are: assessment and planning for students with special education needs; assistive technology for students with dyslexia; co-teaching for students with special education needs; individual education planning for students with special education needs; autism, mental health and anxiety (<https://www.sess.ie/sess-post-primary-courses>).

Inclusive Education and Special Needs

The Department of Education and Skills' current policy is to secure the maximum possible level of inclusion of students with SEN in mainstream primary and post-primary schools, while ensuring that specialist facilities continue to be provided for learners whose needs are such that they need to be placed in special schools or in special classes in mainstream schools.

Education for students with special educational needs is provided on a continuum of support basis. Students with special educational needs may be taught in a mainstream school and receive additional teaching support in the school. They may also attend a special class attached to a mainstream school and be partially integrated within the school. Where students require more specialist interventions, they may attend a special school.

Every mainstream school is allocated class/subject teachers in line with specific pupil–teacher ratios at primary and post-primary levels. These posts are allocated to the school to enable them to educate all enrolled students. Each mainstream school also receives an additional allocation of special education teachers, based on the school size and the profiled needs of the school. The Special Education Teaching



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Development of Inclusive Education Project

allocation provides a single unified allocation for special educational support teaching needs to each mainstream school, based on each school's educational profile.

This allocation includes provision for:

- A Baseline component provided to every mainstream school to support inclusion, prevention of learning difficulties and early intervention.
- Account of the number of students with complex needs attending the school.
- The learning support needs in schools, as evidenced by attainment levels in standardised test results.
- The social context of the school including disadvantage and gender.

The provision of a profiled allocation is designed to give a fair allocation for each school which recognises that all schools need an allocation for special needs support, but which provides a graduated allocation which takes into account the actual level of need in each school.

School profiles are updated initially every two years. However, where exceptional circumstances arise, where a school profile significantly changes following the allocation process, schools may apply for additional allocations to be made in the interim.

Special Education Circulars 13/2017 and 14/2017 contain details of the manner in which special education teachers are allocated to mainstream schools.

Enrolment in special classes in mainstream schools and in special schools is reserved for students with assessed SEN. Teacher allocations for special schools and special classes are determined on the basis of the disability profile of the students within the special class or school, for example, 11:1 in the case of a class for students with mild general learning disability (GLD) and 6:1 in the case of a class for students with autistic spectrum disorder.

The NCSE in 2011 has developed the *Inclusive Education Framework: A guide for schools on the inclusion of pupils with special educational needs*. The Framework is based on 5 Key Principles:

1. Ownership by whole-school community - The framework engages the whole-school community in a reflective process. This promotes a shared understanding of inclusion for students with special educational needs and a commitment to its development. Successful engagement with the framework is facilitated by whole-school ownership of the process.

2. Reflective of student and school diversity - Students with special educational needs have diverse abilities, characteristics, learning needs and styles. They are educated in mainstream primary, post-primary and special schools. These vary in size, enrolment, patronage, location and disadvantage status. The framework is organised under thematic headings which are not setting specific but instead seek to reflect the many forms of educational settings and the diversity of the students they serve.

3. Supporting engagement - All schools have a responsibility to be inclusive in their policies and practices. Schools are invited to determine how best to use the Inclusive Education Framework, how to interpret the outcome and set their own priorities. The framework is designed to allow maximum



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Development of Inclusive Education Project

flexibility for use across settings and is non-prescriptive. Schools engage in a process of self-assessment with the framework to measure their levels of inclusion.

4. Embedded in ongoing whole-school planning - Engagement with the framework is designed to integrate with and inform school development planning activities and continuing professional development programmes. The templates facilitate schools to document evidence of current policies and practice, identify strengths and prioritise areas for development in relation to students with special educational needs. The value is in the process itself as there is no one point at which inclusion is achieved. It is an ongoing and dynamic process.

5. Evidence and practice based - The framework is based on a thorough review of the international literature on inclusive education of students with special educational needs. An initial draft of the framework was the subject of an extensive consultative process with the major educational partners; staff in the ten pilot schools also provided feedback. An advisory group, which represents key education and other stakeholders in Ireland, was continuously involved in reviewing drafts and overseeing development.

According to the Education for Persons with Special Educational Needs Act 2004 (Act 30 of 2004) "special educational needs" means, in relation to a person, 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 and cognate words shall be construed accordingly. No specific categories are mentioned in the law. The mentioned act also states that a child with special educational needs should be educated in an inclusive environment with children who do not have such needs unless the nature or degree of those needs of the child is such that to do so would be inconsistent with—(a) the best interests of the child as determined in accordance with any assessment carried out under the Act, or (b) the effective provision of education for children with whom the child is to be educated. The parents have the right to choose the school their child attends.

Number of students in different educational settings in Ireland (academic year 2016/2017)⁵

	Total number of students	Total number of students with SEN	Students with SEN in mainstream	Students with SEN in special classes	Students with SEN in special schools
ISCED 1	562 724	38 543	31 501	4113	2929
ISCED 2	191 704	13 754	10 049	868	2837
ISCED 3	161 686	7923	5515	692	1716
Total No	916 114	60 220			

⁵Data collected by the European Agency for Special Needs and Inclusive Education

According to the above presented data 7% of all students have officially issued statements about their special educational needs.

Hungary

According to the Act on Public Education, teachers in Hungary have the right and obligation to attend the in-service teacher trainings and have to engage in self-training on a continuous basis.



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Development of Inclusive Education Project

The range of pedagogy-related professional services covers the assistance and organization of teachers' training, in-service training and self-training. In-service training is intended to renew, extend and develop the knowledge and skills that are needed in education and teaching to work directly with children and students, organize the activities of the public educational institution, run special pedagogical services and provide pedagogy-related professional services, operate the examination system and perform the assessment and evaluation tasks and management responsibilities of public educational institutions.

In Hungary, the obligation concerning teachers' CPD is stipulated in a government decree. The decree defines two fundamental forms of teacher training:

- In-service training, which is an obligation every seven years; and
- In-service training in preparation for the teachers' special examination.

All teachers are subject to 120 hours in-service training obligation in every 7 years. The in-service training obligation can be fulfilled by completing the following:

- 30-60-120-hour-long accredited in-service training program for teachers;
- Teachers' special examination;
- Participating in complex development projects in cooperation with the teaching staff, which is potentially measured by the student's efficiency;
- Trainings for ICT development;
- Foreign language training.

According to the Government Decree on Regulating the Key Elements of the In-service Training System, the head of the educational institution drafts a five-year CPD program, taking into account the curriculum. The CPD program is approved by the authority which funds the operation of the educational institution, after getting the opinion of the teaching staff. The extension training program may be reviewed once a year, in agreement with the operator. The head of the educational institution makes an enrolment plan covering one academic/school year to implement CPD program. The enrolment plan is drawn up by the head of the public educational institution with the participation of the teachers' professional partnership or, in the lack of such a professional partnership, of the persons employed in the same position and who are potentially available for substituting the absentees. The teaching staff in the educational institution assesses the previous CPD period before preparing the new CPD program. This means that teachers' CPD takes the needs of the teachers, the school and the operator into account.

The teachers' motivation for CPD is primarily provided through the teachers' advancement, employment and wage system, the so-called teachers' career path system introduced as of 1 September 2013. Teachers' CPD is a self-financed educational form; the State offers a grant to help cover the costs. The grant helps to develop the expertise adjusted to local demands and prompts the users to choose economical, yet efficient training forms, as it defines the CPD program of the public educational institution in its institutional competence.

Inclusive Education and Special Needs



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Development of Inclusive Education Project

A main duty of public education in Hungary is to provide for early childhood development before school and to account for students with SEN or those facing difficulties in integration, learning or behaviour. Public education must support development of their full potential, adjusted to their individual needs, and establish possibilities for their full social inclusion.

Neither the previous nor the current Act on Public Education includes any provisions where children with disabilities have to be educated in special education institutions/classes established for this purpose or together with other students. There are now inclusive forms of schooling in most education sectors. Currently, 70% of students with disabilities participating in the public education system receive education in an inclusive methodological framework.

The main priorities for education and inclusive education in 2014–2020 are determined by the National Disability Programme 2015–2025, the Human Resources Development Operational Programme 2014–2020 and the Public Education Development Strategy 2014–2020.

The objectives of these strategies are:

- developing the SEN welfare system that provides the ability to recognise individual needs and characteristics and relevant additional services;
- strengthening inclusive education in mainstream institutions;
- strengthening the role of Unified Special Educational, Conductive Educational Methodological Institutions (USEMIs) in inclusive education;
- improving support for children with severe and multiple disabilities;
- developing pedagogical assistance services;
- improving quality-based early childhood education and care;
- career-building, further education, career counselling system, dissemination and practice of individual transfer programmes,
- transition (individual transition plans).

Provision for students with special educational needs within mainstream education together with students not needing special education is contributing to their successful education and integration in their communities. Mainstream schools also teaching SEN students have to ensure that SEN students are fully integrated and are able to make progress together with other students.

The Guideline for the kindergarten and school education of children and pupils with special educational needs supports inclusive education in mainstream schools and at the same time provides a framework and tasks for schools to develop their local curricula and practice. It also defines the amendments that may be made to the content of subjects to suit the needs of the various groups of SEN students, which should be observed by mainstream institutions as well. Laws allow the preparation of an individual development plan for SEN students if required and based on this the possibility of individual progress.

The Act on National Public Education serves the provision for children, students with special educational needs by means of providing extra services and regulations allowing preferential treatment for SEN pupils:

- The organisational frame of development, as well as the applied special methods and tools in the kindergarten and school education of SEN children, students together with the others in an



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Development of Inclusive Education Project

inclusive manner are always determined by the individual needs of SEN children. SEN children, students are entitled to receive a pedagogical, special educational and conductive pedagogical provision according to their states within the frame of the special support. Provision according to the special support has to be given in compliance with the expert opinion of the expert committee.

- The school providing for SEN students may allow a period of more than one academic year for meeting the curriculum requirements of a school year.
- When calculating the average headcount of classes, groups, SEN children/students are taken into account as two or three children, depending on the type of disability, i.e. the separated classes organised for them can have a maximum headcount of 7-15 pupils, whereas in the case of inclusive education the obligatory use of the above multiplier ensures the relatively lower number of students in the class.
- The institutions participating in the education of SEN children, independent of whether education is provided separated from or together with students without any impairment have to provide obligatory health and pedagogical rehabilitation activities for students in addition to the obligatory number of classes determined for all schools, whereas in the case of severe and permanent disorder of the cognitive functions or the development of behaviour that cannot be traced back to any organic cause, developmental classes have to be organised. Depending on the type of impairment, the number of classes for rehabilitation purposes is 10-50% of the number of obligatory classes, whereas the timeframe of developmental classes is 15% of the obligatory classes. Timeframe can be regrouped in the different grades and classes during the academic year, among the weeks.
- In accordance with the expert opinion of the SEN diagnosis and rehabilitation committee, school heads may exempt SEN students from assessment in some subjects or subject parts. In the secondary school leaving examination students may choose another subject instead of the concerned subjects as specified by the examination rules.
- At exams, SEN students are provided longer preparation time, and all the tools they needed during learning (e.g. computers, typewriters) and may take an oral exam in writing or a written exam orally if needed.
- SEN students may be allowed to learn in a form of education that provides advancement fitting to the individual features and development of SEN student, and individual progress.
- The Act on National Public Education allows the employment of teachers to help inclusive education. The teacher to help inclusive education is a special education teacher or companion employed by the network of mobile special education teachers or network of mobile companions.

In Hungary the Act on National Public Education defines the groups of children and students needing special support within the two categories of children and students requiring special attention. These categories are (1) children, students with special education needs and (2) children, students social, learning and behavioural difficulties.

Children/students with special educational needs are children/students in need of special support who fall into one of the following eight categories on the basis of expert opinion:

- children/students with a physical disability;
- children/ students with (visual, auditory) sensory impairment;



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Development of Inclusive Education Project

- children/students with mental disability;
- children/students with speech disorder;
- children/students with multiple disabilities
- children/students with autism spectrum disorder;
- children/students with other psychological developmental disorders;
- children/students with behavioural regulation disorder.

Children/students with social, learning and behavioural difficulties are children/students with social, learning and behavioural difficulties needing special support who, based on the expert opinion of the expert committee significantly underperform compared to their age, or have social relationship problems or learning and/or behaviour regulation deficiencies, or their integration into the community or personal development is impeded or shows irregularities but do not qualify as students with special education needs.

After the identification of child's special educational needs, the parents can choose the school from the list of recommended schools.

Number of students in different educational settings in Hungary (academic year 2016/2017)⁶

	Total number of students	Total number of students with SEN	Students with SEN in mainstream	Students with SEN in special classes	Students with SEN in special schools
ISCED 1	390 759	25 276	16 426	8850	N/A ⁷
ISCED 2	378 563	32 176	21 974	10 202	N/A
ISCED 3	362 961	20 945	13 736	7209	N/A
Total No	1 132 283	78 397			

⁶Data collected by the European Agency for Special Needs and Inclusive Education

⁷Data not available

According to the above presented data 7% of all students have officially issued statements about their special educational needs. But there is no data about students in special schools.

Latvia

Continuous professional development (CPD) is compulsory in Latvia for teachers at all education levels. Teachers themselves are responsible for acquiring the mandatory in-service training, by receiving CPD programmes of at least 36 hours in three years period.

CPD can be credited within 12 hours of self-development and experience module (seminars, conferences, informal adult education programs). A teacher has to plan CPD activities in cooperation with the head of the school.



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Development of Inclusive Education Project

In Latvia, CPD programmes are divided as type A and type B programmes.

The following institutions are authorised to develop and implement A type CPD programmes:

- Education institutions;
- Teachers' professional NGOs;
- Institutions subordinated to the ministries.

The type A programme may consist of modules and a teacher can form the training of modules from different programmes. A module should be at least six hours, both including theoretical and practical parts. Several modules could comprise the CPD:

- General competences of teacher;
- Education content and didactics;
- Management of education process;
- Teacher's experience (participation in conferences, seminars, master classes etc.).

Acquisition of the type B programme entitles a teacher to teach any other subject or to work in another education level. It also gives teaching rights for a person who does not have the higher pedagogical education.

Training amount of type B programme is at least 72 hours. Developers and implementers of type B programmes are initial teacher training institutions. The programmes have to be coordinated with the Ministry of Education and Science.

Teacher receives a certificate after acquisition of type A and B programme. Since 2009, information about teachers' CPD is administrated centrally by National Education Information System in an electronic database.

In the current situation, teachers' CPD is not fully financed by the state budget, but most municipalities cover these costs. Still, many CPD courses can be obtained through a certain amount of payment and are not reimbursed. In case a teacher wants to attend CPD courses which are not included in the financing plan of the local municipality, training fee is almost always covered by the teacher. A teacher has the right to use 30 calendar days during a 3-year period for CPD, including improvement of competences, with basic salary being retained. CPD is one of the criteria which are taken into account when the quality level of a teacher's professional activity is evaluated.

The examples of the offered CPD courses provided by the universities, municipal boards of education and NGOs include the following topics: pedagogical process working with children with moderate, severe intellectual disabilities and multiple severe disabilities; promotion of positive behaviour in inclusive educational settings; provision of support for students with special educational needs in inclusive educational settings; how to understand children with autistic spectrum disorder and provide appropriate support in learning.

Inclusive Education and Special Needs



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Development of Inclusive Education Project

In the 'Education Development Guidelines 2014–2020 underline the importance of inclusive education and personalised approaches for learners with special needs. The concept of inclusive education is described as a process in which the corresponding diverse needs of all students are ensured by increasing each student's participation opportunities in the learning process, culture and various communities and reducing potential exclusion from education and the educational process.

The main task of the Ministry of Education and Science, the local boards of education and the municipality authorities is to provide the best possible conditions for students with SEN in mainstream education institutions.

There is a strong need to develop a nationwide support system for students with special needs. The National Centre for Education is responsible for implementing national policy in special and inclusive education. Its main objectives are:

- to co-ordinate the development of the support system for SEN;
- to provide methodological guidance for special education;
- to consult all stakeholders about the issues of special and inclusive education;
- to develop co-operation between different national and international agencies;
- to gather evidence of good practice and disseminate it;
- to suggest amendments to legislation concerning the education of people with SEN;
- to improve the assessment of learners with special needs.

During the recent years more attention is paid to increasing the competence of mainstream teachers to work in inclusive settings, because more and more parents of students with SEN choose mainstream schools for their education. During the last several years, the number of special schools has decreased, and more special schools will close in the near future. However, a number of special schools will remain, as there are many families – especially in rural areas – which are affected by the poor economy, unemployment and immigration. Special schools are in demand for families from disadvantaged backgrounds, as these schools provide not only educational services, but also social support.

According to the Regulations of the Cabinet of Ministers, a second teacher should be provided when students with intellectual disabilities and severe and multiple disabilities are included in mainstream settings. Students with severe and multiple disabilities from 5–18 years of age have the opportunity to receive state-funded personal assistant services for mobility and self-care. The assistant provides assistance up to 40 hours per week. The assistance is available throughout the school year. Based on the severity and the type of disability, the school signs a contract with the assistant. The contract specifies the duration of the assistance services, compensation for the assistance services and payment terms.

According to the Law on General Education, if a student attends a special class or is included in mainstream settings, an individual education plan should be developed. The student's parents should be involved in planning the individual education plan. The school is responsible for providing appropriate support measures for learning. The support measures may include the time extension for completing the task, provision of cues when necessary, the use of computers and other measures.



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Development of Inclusive Education Project

Each student with special needs has the possibility of receiving education in the most appropriate educational institution by ensuring they have help from qualified specialists; acquisition of academic knowledge; development of social and work skills; practical orientation in education; preparation for working life and integration into society; remedial instruction and rehabilitation.

The Law on General Education describes special educational needs as a necessity to receive such support and rehabilitation, which creates an opportunity for a student to acquire educational programme, taking into account his or her state of health, abilities and level of development. The law recognizes 9 special educational needs categories. They are the following:

- students with visual impairments;
- students with hearing impairments;
- students with physical disabilities;
- students with long-term illnesses;
- students with speech and language disorders;
- students with learning disabilities;
- students with mental health disorders;
- students with intellectual disabilities;
- students with severe multiple disabilities.

The parents have the right to choose the school for their child to attend.

Number of students in different educational settings in Latvia (academic year 2016/2017)⁸

	Total number of students	Total number of students with SEN	Students with SEN in mainstream	Students with SEN in special classes	Students with SEN in special schools
ISCED 1	121 506	7740	3067	1084	3589
ISCED 2	56 282	4187	1591	408	2188
ISCED 3	61 078	111	1	21	89
Total No	238 866	12 038			

⁸Data collected by the European Agency for Special Needs and Inclusive Education

According to the above presented data 5% of all students have officially issued statements about their special educational needs.

Additional Information on Certification

In different European countries, different institutions are given the right to provide CPD. According to the status of CPD, these institutions issue the certificates after the completion of the training. If CPD is mandatory, the certificate is a document which confirms the completion of the course indicating the theme, number of hours, credit points if applicable. The certificate or its copy has to be submitted to the administration of the school or local authority. The same kind of information is reflected in certificates if CPD is the professional duty of teachers. The content of the certificates is stated in the regulations in which the rights of institutions to implement CPD are stated. If the CPD is optional,



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Development of Inclusive Education Project

certificates confirm the attendance of the participant in the programme, but the content of the certificate is not defined in any act of legislation.

IV. STEM Education and Teacher Training

The STEM acronym was introduced in 2001 by scientific administrators at the U.S. National Science Foundation (NSF). The acronym refers to the career fields in disciplines of science, technology, engineering and mathematics or a curriculum that integrated knowledge and skills from those fields. Since then, STEM-focused curriculum has been extended to many countries of the world.

The study, which was administered jointly by Carnegie Mellon University (CMU) and the Intermediate Unit 1 (IU1) Centre for STEM Education in the US, demonstrated that educators were unsure of the implications of STEM, particularly when scientific and technological literacy of all students was targeted. Educators lacked in-depth knowledge of STEM careers, and, as a consequence, they were not prepared to direct students to those fields.

At the moment, Europe faces a deficiency in the number of people who are knowledgeable about sciences at all levels of society and the economy. It is noted that STEM education research, innovation and practices must become more responsive to the needs and ambitions of European society and reflect its values. Knowledge of sciences referring to all STEM subjects is an integral element for preparing population to be actively engaged and responsible, creative and innovative citizens, to be able to work collaboratively, and fully aware of and conversant with the complex challenges facing society. It helps people to explain and understand the world, to guide technological development and innovation, and to forecast and plan for the future.

The term Science education refers not only to physics, chemistry, biology but to all subjects that are included in the acronym STEM as all these disciplines needs scientific thinking and skills to solve problems in real life situations and the understanding of the ever-changing challenges that will be faced in the future.

According to the Science education policies in the European Commission, science education is vital:

- To promote a culture of scientific thinking and inspire young people in using evidence-based reasoning for decision making, as opposed to values and reasoning processes that are less reliable or that are only based on beliefs or feelings;
- To ensure citizens have the confidence, knowledge and skills to participate actively in an increasingly complex scientific and technological world;
- To develop the competencies for problem-solving and innovation, as well as analytical and critical thinking that are necessary to empower citizens to lead personally fulfilling, socially responsible and professionally engaged lives promoting solidarity at national, European and global level;
- To inspire children and students of all ages and talents to aspire the careers in science and other occupations that underpin our knowledge and innovation-intensive societies and economies in which they can be creative and successful;



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- To enable public, private and third-sector organisations, based in Europe, to find appropriately skilled and knowledgeable people, and to promote and nurture an innovative European wide environment where companies and other stakeholders around the world want to invest, work and live;
- To empower active and responsible participation in public science communication, debates and decision-making as an active engagement of European citizens in the big challenges that humanity faces today (Programme for Research and Innovation Horizon 2020, Policy Brief, 2016).

The STEM education experts from Europe understand that the quality of teaching, teacher induction, pre-service preparation and in-service professional development should be enhanced to improve the depth and quality of learning outcomes. Since the quality of education and the learning outcomes are the bedrock of the future society, the education systems should aim to ensure the systemic changes to teacher induction and pre- and in-service professional development as well as the developments in the classrooms; there is a need to shift the focus on how students and teachers teach and learn together. Many of these actions are within the direct control of individual teachers, course leaders and schools. The quality of an education system cannot exceed the quality of its teachers. Where change is carried out with the support of others, through collaborative networks of educators, students, STEM education researchers and other stakeholders, it is likely to be more invigorating and successful for everyone. Research shows that engaging with colleagues in professional development programmes increases the interest in improving teaching and in reorganizing its priorities to include the teaching of competences. Facilitating greater opportunities to exchange ideas with enterprise and civil society stakeholders brings real-life problems into STEM education preparation and continuous professional development.

Collaboration between formal, non-formal and informal educational providers, industry and civil society organisations should be enhanced to ensure relevant and meaningful engagement of all societal actors with STEM and increase uptake of STEM studies and STEM-based careers to improve employability and competitiveness. Partnerships between teachers, students and stakeholders in science-related fields can offer exciting ways to introduce real-life challenges, with their ethical and social issues, into a classroom setting while also aiding problem-solving skills. Research shows the value of collaborating across schools, families, researchers, informal science educators, enterprise and civil society organisations. Collaboration may also involve museums, science centres, parks and nature centres. Taking an approach to STEM education innovation that adopts the principles of Responsible Research and Innovation (RRI) would make these voices more evident in setting the agenda for change and would lead to benefits for all.

Methodologies for a Responsible Science Education in Europe;

- Inquiry-based Science Education (IBSE) - Inquiry approaches to STEM education is the complex process of sense-making and constructing coherent conceptual models where students formulate questions, investigate relationships and phenomena, build new understandings, meanings and knowledge, convey the information that they have obtained to others and apply their learning productively in unfamiliar situations. Inquiry-oriented science education engages students in: i) authentic, problem based learning activities where there may not be one correct answer; ii) experimental procedures, and reflective activities; iii) teaching – learning sequences



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- where emergent student autonomy and self-regulation are emphasized; and iv) discursive argumentation and communication with peers (“talking science”).
- Problem Based Learning (PBL) - Problem-Based Learning is an instructional method of active learning centred on the investigation and resolution of real-world problems. When students identify the problems they investigate, they have a greater potential to stimulate young people’s interest in STEM issues and the potential of solving problems with science. The problems should be identified by the problem solvers and the students as active (self-regulated) learners should be heavily involved in this process. Problem-Based Learning is driven by open-ended, unstructured and undefined problems with several solutions. The students can work in small collaborative groups as self-directed, active investigators while the teacher adopts the role of a facilitator guiding the students in their investigations.
 - Practical work or Research Projects in STEM Education - Practical work includes tasks in which students observe or manipulate real objects or materials in the laboratory, fieldwork or in the classroom, and it is often an integrated part of IBSE or PBL. It can develop a scientific attitude, such as open-mindedness and objectivity. However, scientific findings do not automatically emerge from the practical work itself. Therefore, reflections over the findings and conversations among students or between teacher and students are essential to make links between observations and scientific findings.

In Europe, the STEM Alliance – inGenious Education and industry, brings together Industries, Ministries of Education and education stakeholders to promote STEM education and careers to young Europeans and address anticipated gaps of future skills within the European Union. The coordinator of the Alliance is the European Schoolnet (a Brussels-based consortium of thirty ministries of education, which is a driving factor for innovation in teaching and learning and fosters pan-European collaboration of schools and teachers) and many globally well-known corporations are partners of the Alliance.

In spring of 2017 STEM Alliance started the programme “STEM Professionals Go Back to School” to engage company professionals (technicians, scientists, engineers, researchers or employment and recruiting managers) to visit schools and participate in collaborative activities with them. The aim is to close the gap between industry and education sectors, to raise pupils and teachers’ awareness on STEM careers and to promote STEM jobs. In the framework of the programme a number of support materials for schools, teachers and professionals were developed. A brochure, a booklet, on-line tool, 6 webinars, 5 posters and 4 banners are available on the website: <http://www.stemalliance.eu/pgbs>

The STEM Alliance has developed the Teacher Discovery Placement Scheme which is an initiative in collaboration with the SYSTEMIC (Say Yes to STEM in the Classroom) project of European Schoolnet. It is aimed at company and other science, technology, engineering, and mathematics (STEM) industry-related organisation representatives, who are interested in sharing their everyday working experience with educators. Teacher placements can take shape in various forms, depending on the length, the focus and the tasks and responsibilities of the placement. It can be organised by companies, as well as by civil society organisations, research laboratories, or start-ups. The goal of these placements is to familiarise teachers with the knowledge and skills used in the 21st century workplace, specifically STEM workplaces, in industries such as biotechnology, life sciences, chemical or electrical engineering industries.



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A team of education and corporate experts for businesses that are committed to promoting education and employability in science, technology, engineering and maths (STEM) has developed a *Successful Teacher Placement Scheme – A Guide for Companies*.

STEM teacher placements in industry provide an opportunity for teachers to upgrade their knowledge, skills and competences in STEM and improve the teaching and learning of these subjects. They also help teachers integrate 21st century skills and competences into their teaching – giving students insights into skills needed in the workplace. During these work placements, STEM teachers spend time in a company and experience what it's like to be part of the organisation's workforce.

All teacher placements are a means to familiarise educators with scientific, academic and technological cutting-edge research, knowledge, skills and competences and dispositions for vocational success. In addition, these placements will provide major structured learning opportunities, as a full-fledged part of teachers' Continuous Professional Development activities (CPD). It is also hoped that such teacher placements are part of an innovative school strategy to promote quality STEM education based on problem-based learning (PBL) and inquiry-based science education (IBSE). Teacher placements are a unique opportunity to contribute to the school as a learning organisation.

STEM Alliance also provides CPD for teachers of STEM subjects online. The Massive Open Online Courses (MOOCs) are a series of online training activities made available over the Internet free of charge to a very large number of people. The main audience for the MOOCs is primary school teachers and secondary school STEM teachers, school principals and career counsellors. The MOOCs generally last for a certain number of weeks and include a set number of learning modules, carried out individually by participants, in which they will engage directly with the learning material provided by the course. The workload is estimated to be a few hours per week, but it can be tailored according to the participants need in the most flexible fashion. As for assessment strategies and evaluation methodologies for the MOOCs, quizzes, peer reviews and self-reviews are generally used. At the end of the MOOC, digital badges and digital certificates are made available for the course participants.

The other online pedagogical activity is the Community of Practices (CoP) which is a moderated discussion with ideas to discuss, an array of open questions to engage participants in the discussion and a set of resources for those interested in exploring more about the topic. The theme of discussion revolves around the subjects of STEM job attractiveness and/or of innovative STEM teaching. The communities last for two weeks each and cover a specific topic of choice. Between two and three professionals from the industry sector and/or from other sectors act as experts and share their knowledge with the CoP participants, teachers or other education professionals. (<http://www.stemalliance.eu/cod>)

One of the mentioned partners is Microsoft which understands that it is necessary to demonstrate the creative potential of STEM subjects within other fields and give students the opportunities to gain hands-on, practical experience with STEM from an early age. Microsoft believes in taking an integrated approach to the challenge weaving technology into STEM teaching at different levels and in different ways. For instance, by bringing hands-on activities to schools through programs such as *Make Code*: this includes partnerships with *Micro:bit* and *Lego* to enable even the youngest students to start coding and creating through technology. As pupils gain experience, they can transit to inquiry-based projects



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Development of Inclusive Education Project

using *Hacking STEM* resources, which teach essential data science skills as well as encouraging creative applications of the technology. Learning through playing is another way to encourage students to apply STEM skills: the Minecraft: Education Edition is tailored to this goal. Using the tool, Minecraft Mentor teachers provide lesson plans, ready-made Minecraft worlds, and peer-support for colleagues.

The other European level organization which supports the development of STEM subject learning is *Scientix: The Community of Science Learning in Europe*. Scientix promotes and supports a Europe-wide collaboration among STEM teachers, education researchers, policymakers and other STEM education professionals. Scientix was originally born from the initiative of the European Commission and has, since its inception, been coordinated by European Schoolnet. At present 36 countries are involved in the activities of Scientix, including Israel and Turkey. During the period of 2013 -2015 Scientix reached out to national teacher communities and contributed to the development of national strategies for wider uptake of inquiry-based and other innovative approaches to science and maths education.

Scientix offers a wide range of tools and services to science and mathematics teachers, from facilitating Europe-wide collaboration of teachers to professional development and open educational resources. Science teachers can:

- Find new educational resources in the Scientix resource repository;
- Get free translation of learning resources, through the Scientix translation on demand service;
- Discover and get involved in European STEM education projects;
- Participate in Scientix online training and national and European teacher workshops;
- Engage and discuss in the Scientix Communities of Practice;

Teachers can contact Scientix Ambassadors or Deputy Ambassadors in their country, who can advise them on how to get involved in European collaboration in STEM and how to get the most of what Scientix offers. Scientix Ambassadors and Deputy Ambassadors can also present Scientix in schools or as part of an event. In Turkey the partner of Scientix is the Turkish Ministry of National Education, General Directorate of Innovation and Educational Technologies.

European Commission for the years of 2014 – 2020 has set up Erasmus+ programme to support education, training, youth and sport in Europe. The aim of Erasmus+ is to contribute to the Europe 2020 strategy for growth, jobs, social equity and inclusion, as well as the aims of ET2020, the EU's strategic framework for education and training. In the framework of the programme the teachers are provided with the opportunity to participate in experience exchange with their colleagues in different countries, to participate in CPD including for the subjects of STEM, to create their own networks. Schools and individual teachers have the opportunity to choose the topics they are interested in from the catalogue of the topics which is published on-line every year.

V. Teaching and Learning International Survey (TALIS)

The OECD Teaching and Learning International Survey (TALIS) is an international, large-scale survey of teachers, school leaders and the learning environment in schools. TALIS uses questionnaires administered to teachers and their school principals to gather data. Its main goal is to generate internationally comparable information relevant to developing and implementing policies focused on



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school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning. It is also a collaboration between participating countries and economies, the OECD, an international research consortium, teachers' unions and the European Commission.

TALIS 2018 is the third cycle of survey and the total number of participants is 48 countries and economies. In 2018, 15 countries and economies surveyed teachers and school leaders in their primary (ISCED level 1) schools, 11 did so in their upper secondary (ISCED level 3) schools and 9 countries conducted the survey in schools that participated in the 2018 Programme for International Student Assessment (PISA) through the TALIS-PISA link option.

The key features of TALIS 2018 survey design are as follows:

- International target population: lower secondary education teachers and school leaders of mainstream schools.
- Target sample size: 200 schools per country; 20 teachers and 1 school leader in each school.
- Mode of data collection: questionnaires completed on paper or online.

TALIS results are based exclusively on self-reports from teachers and school leaders and, therefore, represent their opinions, perceptions, beliefs and accounts of their activities. No data imputation from administrative data or other studies is conducted. In addition, as a cross-sectional survey, TALIS cannot measure causality. For instance, in examining the relationship between teachers' participation in professional development and self-efficacy in teaching, it is possible to determine the sense (positive, negative) of the association, its strength and its statistical significance, but it is not possible to establish whether participating in professional development depends on self-efficacy or whether self-efficacy depends on participation in professional development.

Chapter 5 *Providing Opportunities for Continuous Development* examines participation rates in in-service training for teachers and principals and discusses the different types of development opportunities available to them. It also reports teachers' views on the characteristics of impactful training.

The survey points out that the inclusion of participation in CPD as an indicator for the United Nations (UN) Sustainable Development Goals (SDGs) is evidence of the increasing relevance that continuous training has on the development of teachers.

In TALIS 2018, the percentage of participation in training is derived from teachers who have at least attended one of the following types of professional development in the 12 months prior to the survey:

- courses/seminars attended in person
- online courses/seminars
- education conferences
- formal qualification programmes
- observation visits to other schools
- observation visits to business premises, public organisations, or non-governmental organisations
- peer and/or self-observation and coaching
- participation in a network of teachers
- reading professional literature
- other types of professional development activities

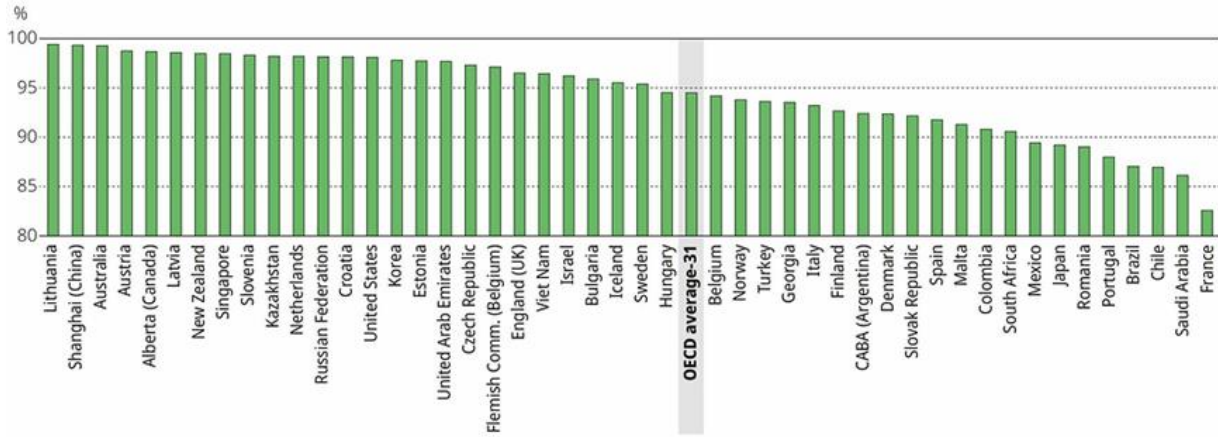


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Graphic 1. Participation in professional development activities
Percentage of lower secondary teachers who participated in professional development activities

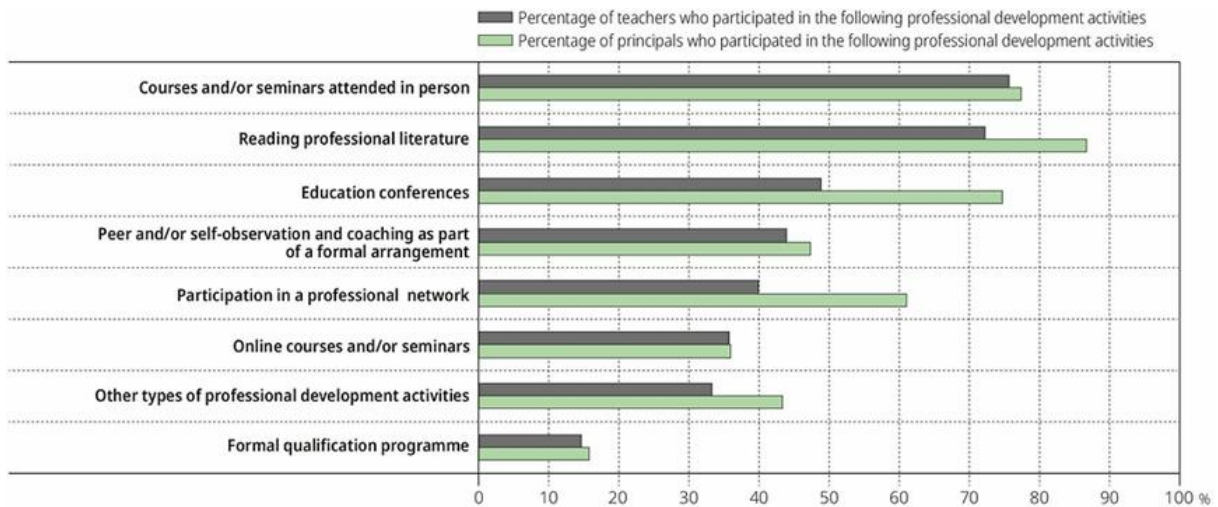


Source: TALIS 2018

Regarding differences in participation based on school characteristics, it is reassuring to observe from TALIS results that, in the vast majority of countries and economies, there are no significant differences in CPD participation across school types, locations or socio-demographic composition. These results may reflect that, for the most part, the characteristics of the school where teachers work do not translate into barriers to participation.

The formats of CPD range from formally structured activities (e.g. conferences, workshops, participating in a formal qualification programme) to informal activities (e.g. networking, within-school peer collaboration, reading professional literature).

Graphic 2. Type of professional development attended by teachers and principals
Results based on responses of lower secondary teachers and principals (OECD average)





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Source: TALIS 2018

According to the literature review cited in the survey attendance at courses and seminars has often been criticised as a traditional approach to teachers' development, since such programmes tend to view teachers as passive recipients of knowledge rather than co-constructors of their own development. Although these types of programmes are necessary and have been found to be effective in providing teachers with the content and subject knowledge required to improve their skills, they are usually disconnected from the context of the schools where teachers work and from the daily reality of their classrooms. A school-embedded approach to CPD activities is proposed as more appropriate. School-embedded professional development is able to incorporate the teaching experience, the school context and teachers' collegiality to improve teachers' instruction. CPD training is more likely to affect teaching practices if teachers can relate the content of their training to their everyday work in their schools and classrooms. Furthermore, since school-embedded professional development relies on capacities and know-how within schools (e.g. school climate, networking, quality relationships), it can be a cost-efficient way to support teachers and principals

TALIS asked teachers to select the topics that were covered in their CPD activities from a list of 14 items. For each of the items, teachers were also asked to indicate their level of need for training, choosing among: "no need"; "low level of need"; "moderate level of need"; and "high level of need". On average across OECD countries, teachers tend to take part in subject or content oriented CPD activities that focus on specific subject areas, pedagogy of the subject and general pedagogic topics.

Graphic 3. Participation in professional development for teachers and need for it

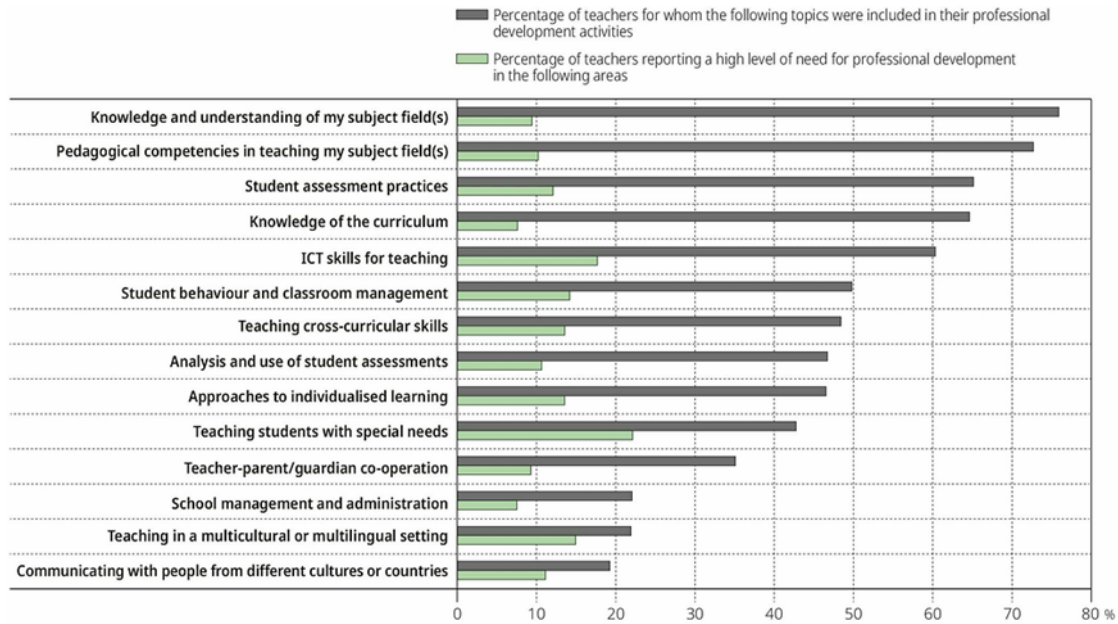


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Results based on responses of lower secondary teachers (OECD average-31)



Source: TALIS 2018

As described in previous chapters in European countries CPD is provided by different institutions (e.g., higher educational institutions, NGOs, schools) and it could be mandatory, professional obligation of teachers or optional. Because of this there is no common methodology for gathering statistical data on the number of teachers who attended CPD, number of trainings provided or topics of CPD and no such statistics is provided on European level.

VI. Conclusions

After providing information of CPD in Europe and in five specific European countries as well as information about how inclusive approach in education is implemented in those countries, we could observe certain similarities and also differences.

The majority of European countries implement mandatory CPD for teachers and most often the number of hours that should be completed in one year is defined. Out of 21 countries only 3 countries determine the number of days in a year that should be devoted to CPD. Hungary has the most hours and the longest period of time (120 days in 7 years) in which the mandatory CPD has to be completed. From five countries viewed in this report Latvia and Hungary have the mandatory status of CPD for teachers.

From 14 European countries where CPD is considered a professional duty of teachers Finland and Italy are the examples. CPD is optional in 8 European countries including the viewed Ireland and Turkey.

If we look at the authority levels responsible for defining the needs and priorities of CPD then top-level authorities in Ireland, Latvia and Turkey are involved in determining priorities and needs of CPD, in Hungary and Italy schools contribute to the process of the identifying CPD needs together with top-level educational authorities. In Finland specific CPD priorities and activities maybe defined at local and school level in addition to those needs and priorities that are defined at the top-level authority.



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In three viewed countries – Finland, Ireland, Italy – the legislation does not provide specific categories for students with special educational needs. In Hungary, Latvia and Turkey the legislation identifies specific categories for students with special educational needs.

Where categories are not identified the focus in education is more of the provided services and provisions for ensuring child's participation in education. In the countries where specific categories are identified the attention is drawn to the disabilities, impairments and disorders the child has implying that the needs of the child could present problems in the process of education.

General conclusions:

- In today's world, it is imperative to provide quality education for all taking into account everybody's educational, social, physical and emotional needs. School is the place where young people learn to live and work together without prejudice.
- It is globally agreed that teachers are the most important school resource, meaning that if there is a need to improve the quality of education for all students, the national governments have to invest in this resource by providing wide range of professional development opportunities.
- The implementation of inclusive education requires the shift in understanding of teachers' competencies as these competencies are the combination of attitudes, knowledge and skills.
- To implement quality education for all students with diverse educational needs, teachers need to support them by providing them with access to teaching and learning materials, innovative strategies and procedures to ensure the possibility of individualized and tailor-made approaches to different needs of students, opportunity to learn from each other and to have support from the interdisciplinary team of specialists.
- Continuous professional development/in-service training could be implemented in different ways in different European countries, but the needs of teachers are the most relevant ones for the responsible parties to choose the training programmes. It concerns also cases if the teachers need the in-service training concerning implementation of inclusive education or STEM subjects.
- To promote better acquisition of the knowledge of the STEM subject, the education sector in different European countries cooperates with industries and communities to promote interest of students and to show how and where the knowledge and skills acquired in STEM subjects are applied.
- Regardless of what subject that the teachers teach or in what kind of school they are working at, they have to make sure that every student can access the education according to his/her abilities and level of intellectual development.



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