EUROPEAN
COMMISSION

Brussels, 5.11.2026
SWD(2026) 795 final

COMMISSION STAFF WORKING DOCUMENT

Basic skills improvement measures, enabling factors and advisory services

Accompanying the document

Proposal for a Council Recommendation

on reversing the decline in basic skills

{COM(2026) 785 final}

Contents

Introduction **2**

Part 1: Basic skills improvement measures **5**

1. High-impact teaching methods that accelerate basic skills learning 7
2. Child-centred digital tools for personalised learning 13
3. Assessment and screening 20
4. Targeted tutoring and mentoring for underachieving learners 23
5. Additional learning time, enrichment and catch-up formats 26
6. Addressing non-academic barriers through cross-sector support 30
7. Family engagement programmes to foster basic skills 34
8. Schools–community cooperation for basic skills 38
9. The role of school leaders in promoting basic skills 42
10. Supporting continuity in basic skills across educational transitions 45

Concluding remarks for Part 1 49

Part 2: Enabling factors at system level supporting strong basic skills for all **50**

1. A whole-school and whole-system approach 54
2. Needs identification 58
3. Curriculum and pedagogical approaches 60
4. Building professional capacity 62
5. Resource allocation 64
6. Data collection, monitoring and evaluation 67

Concluding remarks for Part 2 69

Part 3: Mapping of advisory and support services **70**

1. Typology and cross-country patterns 70
2. Policy frameworks and gaps 73

Concluding remarks for Part 3 74

Annex: Consultation inputs **75**

Introduction

Europe's competitiveness, democracy and social and territorial cohesion depend on strong basic skills ([1]). Beyond supporting individual development and employability, basic skills form the foundations to foster informed and active citizenship, strengthen societal resilience, and contribute to the economic prosperity and strategic autonomy of the EU. Missing out on basic skills is not just a loss for the individual but for Europe as a whole, and it is a challenge made more complex by AI and rapid technological progress.

Too many young people across the EU struggle with literacy, mathematics, science, digital and citizenship skills. Underachievement in basic skills remains on the rise across the EU, with record-high rates for literacy (31.3%), mathematics (33.9%), science (25.9%) ([2]) and for computer and information literacy (42.5%) ([3]). Meanwhile, an estimated 67.5% of eighth graders have an adequate level of civic knowledge ([4]). Gaps persist in performance between socio-economically advantaged and disadvantaged students ([5]). Alongside rising underachievement, the share of top performance ([6]) has been falling across the EU in literacy (6.5% in 2022 to 4.8% in 2025), mathematics (7.9% in 2022 to 6.8% in 2025) and science (6.9% in 2022 to 6.4% in 2025). These challenges jeopardise progress toward the European Education Area and its 2030 EU-level targets ([7]). They constitute a basic skills crisis that threatens the inclusiveness of the EU education systems, questioning the very social and economic sustainability of Europe.

The Commission adopted, in March 2025, an **Action Plan on Basic Skills**, embedded in the **Union of Skills**, engaging the EU and Member States to provide solutions to enhance basic skills levels and promote excellence. The November 2026 Commission Communication 'Stronger education foundations for all in the age of AI' and Commission proposal for a **Council Recommendation on reversing the decline in basic skills**, both part of the **Education and Skills Package**, outline concrete actions to support education systems and schools across the EU in raising basic skills proficiency through evidence-informed approaches. Two newly envisaged actions are: *(i)* **European School Alliances**, a new framework for sustained cooperation for schools and their authorities to

([1]) In this document basic skills are to be understood as comprising literacy, mathematics, science, digital and citizenship skills (as described by the European Commission's 2025 Action Plan on Basic Skills).

([2]) These are 15-year-old students (attending educational institutions in grade 7 of compulsory education or higher) who do not reach level 2 on the proficiency scale in the respective domain (reading, mathematics or science) in the 2025 Programme for International Student Assessment (PISA) conducted by the Organisation for Economic Co-operation and Development (OECD). European Commission: Directorate-General for Education, Youth, Sport and Culture, *EU PISA 2025 – First results*, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2766/1115282.

([3]) These are students in their eighth year of schooling (age 13-14) performing below the level 2 threshold on the computer and information literacy achievement scale in the 2023 International Computer and Information Literacy Study (ICILS) conducted by the International Association for the Evaluation of Educational Achievement (IEA). European Commission: Directorate-General for Education, Youth, Sport and Culture, *International Computer and Information Literacy Study (ICILS) in Europe, 2023 – Main findings and educational policy implications*, Publications Office of the European Union, 2024, https://data.europa.eu/doi/10.2766/5221263.

([4]) These are students in their eighth year of schooling (age 13-14) reaching at least competence level B in the 2022 International Civic and Citizenship Education Study (ICCS) conducted by the International Association for the Evaluation of Educational Achievement (IEA). Caution is warranted as this indicator has limited country coverage (until ICCS 2027) and does not capture the breadth of citizenship competences. European Commission's *2026 Education and Training Monitor* (forthcoming); Damiani, V. et al., editors. *Young Citizens' Views and Engagement in a Changing Europe: IEA International Civic and Citizenship Education Study 2022 European Report*, Springer Cham, 2025, https://doi.org/10.1007/978-3-031-68631-3.

([5]) Only 15.6% of 15-year-olds with a disadvantaged socio-economic background performs well in at least one domain (literacy, mathematics or science) in PISA 2025. European Commission's *2026 Education and Training Monitor* (forthcoming).

([6]) Learners who reach PISA level 5 or higher on the proficiency scale (1-6) in at least one domain (reading, mathematics or science). European Commission: Directorate-General for Education, Youth, Sport and Culture, *EU PISA 2025 – First results*, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2766/1115282. For more information on nurturing top performance and educational excellence, please consult the following Pathways to School Success Policy Action Brief: https://data.europa.eu/doi/10.2766/9012275.

([7]) In particular, the 2030 EU-level targets aim at lowering the proportion of 15-year-olds with low achievement in reading, mathematics and science, and of eighth graders with low achievement in computer and information literacy, to below 15%, increasing the share of 15-year-olds with top performance in reading, mathematics and science to at least 12%, and increasing the share of 15-year-olds from disadvantaged socio-economic backgrounds with good results in at least one area (reading, mathematics or science) to at least 25%. The 2026 Council Resolution can be found here: https://eur-lex.europa.eu/eli/C/2026/3720/oj/eng.

team up across borders and work together towards common goals; and *(ii)* the **EU Network of Advisory and Support Services**, which will help schools to find practical support more easily and supports the development of strong national and regional services.

This staff working document underpins the Education and Skills Package, and especially its Communication 'Stronger education foundations for all in the age of AI' [8] and proposal for a Council Recommendation on reversing the decline in basic skills [9]. Particularly, both the European School Alliances and the EU Network of Advisory and Support Services will focus on proven, evidence-based basic skills improvement measures (Part 1 of this staff working document), firmly anchored in longer-term enabling factors at system level (Part 2). The EU Network of Advisory and Support Services, moreover, will rely on – and support – the 'knowledge intermediaries' of advisory and support services (Part 3). Moreover, the afore mentioned Communication and proposal for a Council Recommendation are underpinned by the *EU PISA 2025* policy brief published in September 2026 [10], which details the latest trends and key drivers of the decline in literacy, mathematics and science.

Literacy, mathematics, science, digital and citizenship skills are an interconnected set of foundations for all future learning and engagement, preparing learners for full participation in a digital, green and democratic society:

BASIC SKILL ([11])	DEFINITION
Literacy	The ability to understand, use, evaluate, reflect [on information] orally and in writing using visual, audio and digital materials across disciplines and contexts.
Mathematics	The capacity to reason mathematically and to formulate, use and interpret mathematics to solve problems in real-world situations and make well-founded judgements and decisions based on data.
Science	The ability to engage with science-related issues and ideas as a reflective individual. This requires skills such as explaining phenomena scientifically, evaluating and designing scientific enquiries, and interpreting data and evidence.
Digital	The confident, critical and responsible engagement with digital technologies for learning, working and participating in society. This includes information literacy, communication, media literacy, digital content creation, online safety and digital well-being.
Citizenship	The ability to act responsibly and participate fully in civic life, grounded in an understanding of social, economic, legal and political structures. This involves understanding and evaluation of civic and democratic concepts, institutions and processes, including democracy, media literacy, crisis preparedness and respect of others and freedom of speech.

Whereas Part 2 this staff working document highlights the systemic reforms needed to promote school success through both universal and targeted measures, Part 1 proposes a set of basic skills improvement measures supporting more immediate improvements in literacy, mathematics, science, digital and citizenship competences. These measures are intended to complement - not replace - longer-term reforms ([12]). While systemic change remains essential for sustainable progress, basic skills improvement measures can help address pressing learning needs, support learners at risk of falling behind, and strengthen schools' capacity to improve outcomes. They can also serve as a catalyst for wider transformation by introducing effective practices and building momentum for reform.

The six enabling factors ensuring quality school education for all provide the framework for implementing these measures ([13]). Together, they promote equity, inclusion and well-being while

([8]) COM(2026) 770.
([9]) COM(2026) 785.
([10]) European Commission: Directorate-General for Education, Youth, Sport and Culture, *EU PISA 2025 – First results*, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2766/1115282.
([11]) The definitions of literacy, mathematics, science, digital and citizenship skills used here are based on the European Commission's 2025 Action Plan on Basic Skills, which, in turn, draws on the OECD PISA assessment frameworks, the 2018 Council Recommendation on key competences for lifelong learning, and the IEA's ICILS and ICCS.
([12]) For an analysis of these longer-term, systemic reforms, see European Commission / EACEA / Eurydice (2025). Addressing underachievement in literacy, mathematics and science. Policy changes in European school education since 2020. Eurydice Report. Luxembourg: Publications Office of the European Union. https://doi.org/10.2797/1883015.
([13]) See Part 2 of this staff working document.

balancing universal and targeted support in the best interests of children and young people. The measures presented in Part 1 are relevant across all levels of school education, from early childhood education and care (ECEC) through to the end of upper secondary and including vocational education and training (VET). They recognise that strong foundations are built early and should be reinforced throughout learners' educational journeys. Moreover, these measures are neither mutually exclusive nor exhaustive ([14]).

([14]) Digital and citizenship competences joined the basic-skills agenda recently, and the available evidence base reflects this. Most research on effective basic skills improvement measures focuses on the first three basic skills: literacy, mathematics and science. For many digital and citizenship measures evidence of impact is hence scarce or not yet available. Nevertheless, drawing on the research underpinning this guide, we have included a number of basic skills improvement measures that show promising potential to also develop these two basic skills.

Part 1: Basic skills improvement measures

Basic skills improvement measures are interventions, implemented at targeted and/or universal level of intervention[15], that have demonstrated **rapid, measurable improvements** in learners' basic skills proficiency when implemented well. However, their **sustainable long-term success** depends on two key conditions:

- **High implementation fidelity** – ensuring that interventions are delivered as intended and supported by professional development and **explicit monitoring and evaluation frameworks** (see Box below).

- **Integration into broader reform efforts** – aligning them with the six enabling factors ensuring quality school education for all ([16]) to avoid fragmentation or short-lived impact ([17]).

Monitoring and evaluation

Monitoring and evaluation are essential both for ensuring that implementation stays on track (that basic skills improvement measures are delivered with the intended intensity, coverage and quality), and for generating credible evidence to guide scaling and system integration. According to OECD guidance on policy implementation ([18]) and the recommendations from the European Commission's Learning Lab on Investing in Quality Education and Training, effective monitoring and evaluation frameworks combine: (i) a clear theory of change linking activities to learning outcomes; (ii) systematic tracking of reach, consistency and quality of delivery; (iii) short feedback loops using formative assessment and implementation data to adapt and improve; and (iv) transparent reporting and data use to inform decision-making at school and system levels. Such frameworks help ensure that promising "quick wins" translate into sustained and scalable improvements in basic skills across education systems. In parallel, the European Commission's Learning Lab on Investing in Quality Education and Training recommends pairing routine monitoring with counterfactual impact evaluation ([19]) to generate reliable evidence for policy decisions and expansion and provides technical assistance to Member States ([20]).

The basic skills improvement measures in this section were **selected through a careful screening process** to ensure that they meet the following criteria:

1. **Direct impact on basic skills**: each intervention explicitly targets one or several competences: literacy, mathematics, science, digital and citizenship skills.

2. **Feasible within 6–24 months**: they can be launched and show measurable effects within one to two school years, making them suitable for urgent action.

3. **Integrable or scalable without major legislative reform**: implementation is mostly possible within current education governance and funding frameworks.

4. **Grounded in robust evidence**: selected based on international and EU research, including meta-analyses and evaluations of large-scale programmes.

5. **Transferable across contexts**: already piloted or implemented in diverse European systems, offering lessons for local adaptation.

Based on these criteria, a review of international evidence and Member State practices, as well as discussions with Member State representatives, ten basic skills improvement measures are presented (see next page). Five of them are primarily of a pedagogical nature and five of a more non-pedagogical nature, though most feature both pedagogical and non-pedagogical aspects or implications.

([15]) See Part 2 on this staff working document on balancing universal measures with targeted support.
([16]) See Part 2 of this staff working document.
([17]) These "quick wins" are not stand-alone initiatives in the long-term. They are designed to work within the six-factor policy framework presented in Part 2 of this staff working document. For example, tutoring relies on strong needs identification (Enabling factor 2). This alignment ensures that short-term efforts reinforce, rather than bypass, systemic change.
([18]) OECD (2020), "An implementation framework for effective change in schools", OECD Education Policy Perspectives, No. 9, OECD Publishing, Paris. https://doi.org/10.1787/4fd4113f-en.
([19]) For instance Randomised Control Trials (RCTs) or robust ex-post designs.
([20]) Learning Lab on Investing in Quality Education and Training - European Education Area.

	#	Pedagogical basic skills improvement measure	Main skills	Education levels	Cost level
	1	**High-impact teaching methods that accelerate basic skills learning**	All basic skills	Primary, Secondary, VET	**Medium**
	2	**Child-centred digital tools for personalised learning**	All basic skills	Primary, Secondary, VET	**Medium**
	3	**Assessment and screening**	Literacy and mathematics	Primary, Secondary, VET	**Medium–High**
	4	**Targeted tutoring and mentoring for underachieving learners**	All basic skills	ECEC, Primary, Secondary, VET	**Low–Medium**
	5	**Additional learning time, enrichment and catch-up formats**	Literacy, Mathematics, Digital, Science	Primary, Secondary	**Medium–High**
	#	**Non-pedagogical basic skills improvement measure**	**Main skills**	**Education levels**	**Cost level**
	6	**Addressing non-academic barriers through cross-sector support**	All basic skills	ECEC, Primary, Secondary, VET	**Medium–High**
	7	**Family engagement programmes to foster basic skills**	All basic skills	ECEC, Primary, Lower Secondary	**Low–Medium**
	8	**Schools–community cooperation for basic skills**	Digital, Citizenship, Science	Primary, Secondary, VET	**Low–Medium**
	9	**The role of school leaders in promoting basic skills**	All basic skills	ECEC, Primary, Secondary, VET	**Low–Medium**
	10	**Supporting continuity in basic skills across educational transitions**	All basic skills	ECEC, Primary, Secondary, VET	**Low–Medium**

1. High-impact teaching methods that accelerate basic skills learning



What it is

Specific teaching approaches (e.g. systematic phonics for early literacy ([21]), explicit instruction ([22]) with worked examples for mathematics, structured inquiry for science, and social-emotional learning for the citizenship and digital competence), which have been systematically tested and shown to produce consistent learning gains in their respective skill areas. The aim is not to prescribe a single method for all teachers, but to help schools identify and implement approaches with a strong evidence base, supported by sustained professional development rather than one-off training.

Several such methods are particularly suited to top performers, especially when paired with differentiation and enrichment that add depth and conceptual challenge rather than more work.



How to put it in practice

Effective teaching approaches improve learning outcomes when they are evidence-informed, consistently applied, supported by high-quality materials, and reinforced through sustained professional learning and coaching.

System / Ministry level	School level
Agree on a concise set of validated pedagogical approaches (either a mandated core or a structured menu with clear selection criteria) and communicate this consistently to schools so leaders are not making unsupported choices from an open field.[23])	Equip teachers with the materials each method needs (e.g., decodable readers, worked-example sets, manipulatives, curriculum-aligned digital content) so they are not building from scratch.
Embed the chosen approaches in initial teacher education so new teachers arrive in classrooms already familiar with them; and reinforce them through continuous	Render basic skills a shared responsibility of all teachers, regardless of the education level ([24]).
	Replace one-off training with sustained in-classroom coaching: regular lesson

([21]) Systematic phonics is the planned, sequential teaching of letter–sound relationships so that children learn to decode words (for more information, see: Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. 2001. Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. Review of educational research, 71(3), 393-447. https://doi.org/10.3102/00346543071003393).

([22]) Explicit instruction is a structured, teacher-led approach in which skills are taught directly and in a logical sequence (clear explanations, worked examples, guided practice with feedback, then independent practice) rather than left for learners to discover (for more information, see: Stockard, J., Wood, T. W., Coughlin, C., & Rasplica Khoury, C. 2018. The Effectiveness of Direct Instruction Curricula: A Meta-Analysis of a Half Century of Research. Review of Educational Research, 88(4), 479–507. https://doi.org/10.3102/0034654317751919).

([23]) Some systems (e.g. Sweden) are moving toward mandating specific methods such as systematic phonics; others (Ireland, Portugal) offer structured choice from a portfolio of validated approaches.

([24]) In secondary education, literacy, numeracy, science and especially digital and citizenship skills can be actively developed in several disciplines, even those apparently unrelated: e.g., promoting citizenship skills in history classes, or digital skills in several classes (by promoting the critical use of digital tools for learning). In VET, vocationally contextualised basic skills teaching is also possible, for example embedding basic skills in occupational tasks and work-related projects.

	professional development so practising teachers can adopt and refine them over time.		observation, structured feedback, and protected time for teachers to plan and reflect together.
	Fund the learning materials and sustained coaching required for implementation; one-off training without follow-up support consistently fails to change classroom practice		Block out dedicated, daily timetable slots for structured basic skills sessions and protect them from displacement (for example, 20–30 minutes of systematic phonics every morning in early primary).



Evidence at a glance

Robust meta-analyses show systematic phonics and explicit instruction significantly improve early reading and maths. ([25]) The pedagogical accelerators below are drawn from large-scale meta-analyses and intervention trials. They have a proven capacity to speed up learning among students below proficiency levels when implemented systematically and supported through teacher professional development. The examples below represent three complementary pathways to improvement: (1) structured and cumulative instruction for core literacy and mathematics; (2) guided inquiry that builds critical thinking; and (3) integrated socio-emotional and digital learning approaches that strengthen motivation and transfer of skills.

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Systematic phonics instruction	Literacy	ECEC, Primary	Daily 20-30 minute sessions; Sequential skill progression; Teacher training on explicit instruction	Moderate positive effects with larger effects when instruction begins early (d = 0.41 to d = 0,55) ([26])	Medium-cost delivery (classroom materials, teacher training).
Explicit instruction with worked examples	Math	Primary, Lower Secondary	Teacher modelling; Step-by-step demonstrations of problem-solving; Immediate corrective feedback	Worked examples have a moderate effect on mathematics outcomes ([27])	Low-cost delivery (teacher training)
Inquiry-based science education	Science	ECEC, Primary, Lower Secondary	Guided exploration; Hands-on experiments; Teacher as facilitator;	A 2025 meta-analysis found a large effect of inquiry-based learning on students' critical thinking	Medium cost delivery (lab materials and CPD).

([25]) E.g., Castles, A., Rastle, K., & Nation, K. (2018). Ending the Reading Wars: Reading Acquisition From Novice to Expert. Psychological Science in the Public Interest, 19(1), 5-51. https://doi.org/10.1177/1529100618772271; or Charitaki, G., Tzivinikou, S., Stefanou, G., & Soulis, S. G. (2021). A meta-analytic synthesis of early numeracy interventions for low-performing young children. SN Social Sciences, 1(5), 105. https://doi.org/10.1007/s43545-021-00094-w.

([26]) Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the National Reading Panel's meta-analysis. Review of educational research, 71(3), 393-447. https://doi.org/10.3102/00346543071003393.

([27]) Barbieri, C. A., Miller-Cotto, D., Clerjuste, S. N., & Chawla, K. (2023). A meta-analysis of the worked examples effect on mathematics performance. Educational Psychology Review, 35(1), 11. https://doi.org/10.1007/s10648-023-09745-1.

			Technology integration	skills (g = 1.27, 95% CI 0.78–1.76), indicating a significant impact of inquiry-based science education on critical thinking, though with notable variation depending on context and implementation ([28])	
Simulation games	Citizenship	Lower and upper secondary	Short format compatible with regular timetable (~3 hours); structured roles (e.g. MEPs); debriefing session; facilitated by trained staff; co-decision topics relevant to students' lives	Pre-post study (N = 308, no control group) in German secondary schools found medium effects on EU knowledge (d = 0.42) and perceived EU responsiveness (d = 0.42); stronger knowledge gains for low prior-knowledge students; high student satisfaction (94.8%); limited effects on political participation willingness ([29])	Low-to-medium cost; short format reduces timetable burden
Digital literacy education (including digital citizenship)	Digital	Primary, Lower & Upper Secondary	Comprehensive digital literacy approach (combining technical skills with cognitive and social-emotional dimensions) rather than narrowly technical skills training; teacher and parental guidance especially important at primary and lower secondary level	A meta-analysis of 35 studies (nearly 50,000 students) found a consistent positive link between digital literacy and academic performance. The link is stronger when digital literacy is taught as a full set of skills (technical, cognitive, and social) rather than technical operation alone, and	Lower cost when integrated into existing subjects and timetables; higher cost when delivered as a separate standalone programme

([28]) Arifin, Z., Saputro, S., & Kamari, A. (2025). The effect of inquiry-based learning on students' critical thinking skills in science education: A systematic review and meta-analysis. Eurasia Journal of Mathematics, Science and Technology Education, 21(3). https://doi.org/10.29333/ejmste/15988.

([29]) Oberle, M. & Leunig, J. (2017). Simulation games on the European Union in civics: Effects on secondary school pupils' political competence. Citizenship, Social and Economics Education, 15(3). https://doi.org/10.1177/2047173416689794.

				strongest at upper secondary level. ([30])	
Social and emotional learning (SEL) programmes	Citizenship	ECEC, Primary, Lower & Upper Secondary	SAFE approach (Sequenced, Active, Focused, Explicit); Integration with academic content	A meta-analysis of 213 studies on school-based SEL interventions show an 11-percentile gain in achievement; as well as improved prosocial behaviour and reduced conduct problems, which are essential components of the citizenship skill ([31])	Medium cost delivery (programme materials and ongoing quality CPD focused on SEL)
Collaborative learning	Literacy, Mathematics, Science, Citizenship	Primary, Secondary	Groups of 3–5 with a shared outcome; structured tasks where all pupils contribute and discuss; active teacher monitoring; CPD required	The Education Endowment Foundation Toolkit (212 studies): average +5 months' progress. Stronger in secondary (+6) than primary (+5), and in science (+10) than literacy (+3). Joint outcomes more effective (+7) than individual outcomes within groups (+4) ([32])	Very low cost; mainly teacher training and planning time; no significant additional resources required
School-based civic participation activities (student council, debate club)	Citizenship	Lower and upper secondary	Structured skill-building activities with regular participation; opportunities to practise democratic decision-making and	Longitudinal study: participation in school-based political activities where students could practise skills was strongly related to	Low (uses existing school structures; adult facilitation time required)

([30]) Li, F., Cheng, L., Wang, X., Shen, L., Ma, Y., & Islam, A. Y. M. (2025). The causal relationship between digital literacy and students' academic achievement: a meta-analysis. Humanities and Social Sciences Communications, 12(1), 1-12. https://doi.org/10.1057/s41599-025-04399-6.

([31]) Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child development, 82(1), 405-432. https://doi.org/10.1111/j.1467-8624.2010.01564.x.

([32]) Education Endowment Foundation (EEF). (2025). Collaborative learning approaches. Teaching and Learning Toolkit. https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/collaborative-learning-approaches.

			deliberation; adult facilitation	political activity three years later. Effect specific to structured skill-building activities, not general extracurricular involvement. ([33]) A systematic review of quantitative intervention studies finds small-group work and democratic decision-making activities can strengthen students' democratic competences ([34])	
Extracurricular clubs as spaces for civic engagement and activism	Citizenship	Upper secondary	Student-led clubs with a faculty sponsor; focus on social justice or civic issues; structured activities including peer education, service learning, and community advocacy; deliberate support for student voice and agency	Analysis of large, representative samples of 14-year-olds across four European systems (N ≈ 14,500) finds that opportunities to experience democratic processes at school, including extracurricular activities, are associated with stronger intended political participation ([35]). Qualitative study (N = 63 high school students, 12 discussion groups, 6 schools in the US Southwest): club	Low–Medium (mainly faculty sponsor time; transport after school hours can be a barrier)

([33]) Keating, A. & Janmaat, J.G. (2016). Education through citizenship at school: Do school activities have a lasting impact on youth political engagement? Parliamentary Affairs, 69(2), 409–429. https://doi.org/10.1093/pa/gsv017.

([34]) Jerome, L., Hyder, F., Hilal, Y., & Kisby, B. (2024). A systematic literature review of research examining the impact of citizenship education on active citizenship outcomes. Review of Education, 12(2), e3472. https://doi.org/10.1002/rev3.3472.

([35]) Deimel, D., Hahn-Laudenberg, K., Ziemes, J. F., & Abs, H. J. (2024). Civic education and social interactions at school as drivers of intended electoral participation: Similarities and differences in four European school systems. Education, Citizenship and Social Justice, 19(1), 37–57. https://doi.org/10.1177/17461979221114549.

				participation fostered critical engagement, activism-related knowledge and skills, and a justice-oriented approach to local and global issues. Note: qualitative study; findings are not generalisable; inequitable access to clubs disproportionately affects low-income and minority students ([36]).	

Examples from Member States and beyond

- **Ireland – DEIS schools' literacy practices (Inspectorate "Good Practice" guidance):** The Department of Education's Inspectorate synthesised effective **literacy and numeracy practices** observed in DEIS schools into a practical guidance publication (first issued 2020; page updated April 2025) ([37]). While the guide itself summarises observed practices, these were not thoroughly evaluated. Nevertheless, independent evaluations of **DEIS** report **narrowing achievement/attainment gaps** between DEIS and non-DEIS students at post-primary level.

- **Spain, Denmark, Portugal, Scotland, Sweden - TeL4ELE (Comenius, 2011–2013):** the programme trained national teams and cascaded Reading to Learn to classroom teachers across five countries, to improve inclusion and students' reading/writing through explicit genre pedagogy. ([38]) An independent external evaluation embedded in the Final Report found high engagement from educators/teachers and pre–post gains averaging ~14.3% in writing and 9% in reading across ~97 classes / ~2,450 students, with teachers reporting changed practice and improved student inclusion/written production. ([39])

- **Sweden – Curriculum reform:** Following the 2022 curriculum revision, Sweden mandated systematic phonics instruction as part of a broader reform with clearer, knowledge-rich content specifications; a deliberate shift toward evidence-based standardisation in core literacy pedagogy.

- **Malta – National Education Strategy 2024–2030:** The strategy introduces a dedicated mathematical literacy strategy and measures to strengthen foundational reading skills in the early years. A reading and recovery programme supported 64 schools and more than 250 students in 2023–2024. The strategy also calls for curriculum reform to reduce content overload and promote deeper learning and critical thinking. While the strategic direction is sound, the 2025 Education and Training Monitor ([40]) notes that sound, practical implementation is still evolving.

([36]) Bartlett, T. & Yemini, M. (2025). Exploring extracurricular clubs in high schools as third spaces for developing youth activism and critical engagement. Journal of Research on Adolescence, 35(2), e70034. https://doi.org/10.1111/jora.70034.

([37]) Department publication hub: Effective literacy and numeracy practices in DEIS schools (overview page; updated 11 April 2025). https://www.gov.ie/en/department-of-education/publications/effective-literacy-and-numeracy-practices-in-deis-schools/.

([38]) Whittaker, R., & Parejo, I. (2018). Teacher Learning for European Literacy Education (TeL4ELE): genre-based pedagogy in five European countries. European Journal of Applied Linguistics, 6, 31 - 57. https://doi.org/10.1515/eujal-2017-0021.

([39]) TeL4ELE Final Report – Public Part (Stockholm Education Administration; project no. 518080-LLP-2011-SE-COMENIUS-CMP) https://www.ucm.es/formule/file/tel4ele-final-report?ver=.

([40]) Education and training monitor 2025 - Publications Office of the EU.

Risks and how to manage them

- **Over-normalisation:** evidence-based methods are not universally applicable; professional judgement in adapting approaches to specific students and contexts should be preserved.
- **One-off training**: a single workshop rarely changes classroom practice; sustained coaching and collaborative professional learning are needed.
- **Student voice:** the perceptions and experiences of students are often disregarded. Mechanisms to hear from students about which approaches work for them are essential.
- **Continuous assessment and monitoring:** implementing a new pedagogical tool without measuring its impact can lead to an insufficient understanding of the actual impact of the tool. The evolution of the basic skill(s) in focus should be carefully and continuously assessed after the implementation of a new pedagogical tool.

2. Child-centred digital tools for personalised learning



What it is

The purposeful, time-bounded use of digital tools (adaptive and AI-powered learning platforms, intelligent tutoring systems, digital formative-assessment tools and teacher dashboards) to accelerate basic skills. Used well, they show where each learner is, personalise practice in literacy and mathematics, provide feedback and free teacher time for higher-order instruction, while building digital competence and AI literacy as skills in their own right. They accelerate learning only when they supplement, not replace, good teaching. Adaptive digital tools can likewise support top performance in basic skills, allowing those who master content quickly to move on to greater challenges. AI-powered learning platforms and generative-AI tutors have the potential to support teaching and learning when AI scaffolds the learners' own work - for example, by offering hints, prompting pupils to explain their reasoning and giving feedback rather than finished answers ([41]), but can also undermine learning when it substitutes to it, for example when AI performs the competence that the learner is expected to develop. The evidence clearly favours tools specifically designed for learning, aligned with the curriculum and used under teacher guidance, over general-purpose chatbots used without such structure ([42]).

In parallel, it is equally important to develop digital well-being (healthy, age-appropriate, balanced use and online-safety habits), which the EU Special Panel on Child Safety Online ([43]) highlighted as an essential component of all digital education. The same design features that make digital tools engaging can also work against well-being through attention-harvesting algorithms, excessive screen time, and opaque use of data. Recent evidence shows that the risk lies less in total screen time than in off-task, compulsive and night-time use: off-task smartphone and social media use is negatively associated with achievement in most studies, and using a portable device at bedtime roughly doubles the odds of inadequate sleep. ([44]) According to the same panel, pupils' device use

([41]) Meyer, J., Jansen, T., Schiller, R., Liebenow, L. W., Steinbach, M., Horbach, A., & Fleckenstein, J. (2024). Using LLMs to bring evidence-based feedback into the classroom: AI-generated feedback increases secondary students' text revision, motivation, and positive emotions. *Computers and Education: Artificial Intelligence, 6*, Article 100199. https://doi.org/10.1016/j.caeai.2023.100199.

([42]) European Commission: Directorate-General for Education, Youth, Sport and Culture. (2026). *Friend or foe? Evidence from the use of generative artificial intelligence in learning and teaching*. Publications Office of the European Union. https://data.europa.eu/doi/10.2766/0227990.

([43]) Fegert, J. M., & Melchior, M. (2026). Child safety online: Protecting and empowering minors in a digital world — Report by the Co-Chairs of the Special Panel on Child Safety Online. European Commission.

([44]) Sankalaite, S., Nada, C., and Crêteur, S. (forthcoming), 'Effects of Digital Distractions on Learning Outcomes', ENESET report, Luxembourg: Publications Office of the European Union. doi: 10.2766/0629241. Drawing on Pyhältö, K., Rekola, H., Salovuori, S., Kosola, S., & Anttila, H. (2025). The relationship between academic achievement and off-task social media and smartphone usage: Evidence from a systematic literature review. Acta Psychologica, 260; and Carter, B., Rees, P., Hale, L.,

needs to be purposeful, supervised and limited, while paired with critical reflection on online risks. Non-educational device use is also linked to weaker learning: in PISA 2025, one-third of EU students reported being frequently distracted by digital tools during classes ([45]), and while limited or moderate use of digital devices for learning at school is often associated with better outcomes, leisure use at school is associated with substantially lower performance ([46]). While these tools carry real potential to improve basic skills, they demand careful pedagogical guidance and ongoing vigilance.

This measure connects to all others in this guide: digital tools extend tutoring (Measure 3), power diagnostic screening (Measure 1), reinforce evidence-based teaching methods (Measure 5), and provide data for better school leadership planning (Measure 9). They are also how digital competence itself develops as a skill to some extent.



How to put it in practice

Digital and blended tools accelerate basic skills when they are well-chosen, time-bounded, and used to supplement and build on prior knowledge rather than replace good teaching, with data feeding directly into targeted support.

System / Ministry level	School level
Set the enabling conditions first: secure digital device access, connectivity, and embed digital education in policy and funding frameworks (Council Recommendations on digital education and on digital skills, 2023).	Select tools that clearly focus on fundamental skills and offer robust teacher-facing features (dashboards, data transparency, and adaptability), rather than solely providing engaging student interfaces.
Curate and quality-assure the digital tools and content recommended to schools against clear criteria ([47]). Criteria should include evidence of learning gains that persist when pupils are assessed without the tool's support, rather than relying solely on usage or satisfaction data. They should also assess the demands tools place on pupils' attention, including notifications, advertising and engagement-maximising features that teachers cannot disable.	Use digital assessment to inform teachers, not to judge pupils. Adaptive tools and Computerised Adaptive Testing can show where a learner is, but the result is a starting point for the teacher's professional judgement, never an automated verdict. Ensure a clear follow-up (who reads the data, what support it triggers).
Build teacher capacity at scale: fund sustained CPD (through universities and national networks) on digital and AI tools for pedagogy and use DigCompEdu to set	Encourage the use AI to lighten teachers' preparation workload (e.g. drafting lesson resources or adapting them to pupils' needs), with teachers checking and adapting every output. Recent studies ([49]) show that teachers

Bhattacharjee, D., & Paradkar, M. S. (2016). Association between portable screen-based media device access or use and sleep outcomes. JAMA Pediatrics, 170(12), 1202.

([45]) European Commission: Directorate-General for Education, Youth, Sport and Culture. (2026). EU PISA 2025: First results (European Education Policy Brief). Publications Office of the European Union. https://doi.org/10.2766/1115282.

([46]) OECD. (2026). PISA 2025 results (Volume I): Future-ready students. OECD Publishing. https://doi.org/10.1787/73451bc5-en.

([47]) Including pedagogical fit and curriculum alignment, accessibility and inclusion, reliability, evidence of impact, legal compliance and data protection. For more information see the EU guidelines 'Making informed choices on digital education content', 2025.

([49]) Roy, P., Poet, H., Staunton, R., Aston, K., & Thomas, D. (2024). *ChatGPT in lesson preparation: A Teacher Choices trial* [Evaluation report]. Education Endowment Foundation. https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/choices-in-edtech-using-generative-ai-chatgpt-for-ks3-science-lesson-preparation-2024-teacher-choices-trial.

shared competence expectations for teachers and school leaders.	using generative-AI tools spent less time on lesson preparation, with no evidence of lower-quality resources.
Establish a data-governance and AI framework involving GDPR compliance, algorithmic transparency and safeguards against bias.	Keep meaningful teacher–pupil interaction at the core. Teachers review dashboard data in lesson planning and use AI-powered pathways for targeted literacy and mathematics practice (built on conceptual understanding and self-explanation, and not simply on continuous repetition). These tools may improve the teaching cycle, but they should not run it.
Promote AI literacy for teachers, learners and the public, using for example the AI Literacy Framework	Design AI use so that pupils do the thinking: prefer tools that give hints and ask questions rather than supplying answers, give pupils who struggle more structured and guided use, and regularly check what pupils can do without AI, as a low-stakes diagnostic rather than as a way of catching cheating.
Give schools a clear legal basis and practical support (secure storage, guidance, professional development) for proportionate restrictions on non-educational device use during the school day, while safeguarding teacher-authorised educational use, for example through school-managed devices ([48]).	Enable safe, critical and responsible use of digital tools (DigComp) and create opportunities to develop digital citizenship competences ([50]) and media literacy.
	Set clear rules on personal devices such as phones during lessons, developed with staff, pupils and families and applied consistently by all staff, with transparent exemptions (e.g. for accessibility or health needs). In class, switch off notifications and functions unrelated to the task in the tools used, and teach pupils how attention-capturing design works ([51]).
	Take a whole-school approach (DigCompOrg) and start small: pilot, reflect and adapt before scaling to the entire school.



Evidence at a glance

In secondary mathematics and science, digital tools improve learning on average, with dynamic mathematics tools and intelligent tutoring systems showing larger effects than generic drill or hypermedia; effects are stronger when tech supplements, rather than replaces, teacher-led instruction([52]). EU randomised trials reinforce that

([48]) Crêteur, S., Dunajeva, J., Frydman, B., Berg Mulvik, I., Del Cogliano, D., Nada, C., Siarova, H., & Sankalaite, S. (2026). Mobile phone bans in schools across the EU. ENESET report. Publications Office of the European Union. https://doi.org/10.2766/2403181.

([50]) DigComp and the forthcoming competence framework on the EU dimension of Education for democratic citizenship.

([51]) Crêteur, S., Dunajeva, J., Frydman, B., Berg Mulvik, I., Del Cogliano, D., Nada, C., Siarova, H., & Sankalaite, S. (2026). Mobile phone bans in schools across the EU. ENESET report. Publications Office of the European Union. https://doi.org/10.2766/2403181.

([52]) Hillmayr, Dirk; Ziernwald, Lena; Reinhold, Frederike; Hofer, Sarah; Reiss, Kristina. The potential of digital tools to enhance mathematics and science learning in secondary schools: A context-specific meta-analysis. 2020. https://www.sciencedirect.com/science/article/pii/S0360131520300968.

design and teacher use are decisive: goal-setting prompts in a blended-learning environment in Germany raised attainment (+0.19 to +0.20 SD) ([53]), teacher engagement in an interactive webinar series in Belgium improved outcomes (+0.39 SD[54]), and computer-assisted reading helped struggling readers in Sweden ([55]). A large cluster-RCT (79 schools; n≈1,800 pupils) of a tablet-based digital formative assessment system with adaptive assignments and teacher dashboards found positive effects on maths achievement and motivation (mixed for spelling in a parallel trial). ([56]) Early studies suggest generative AI may support the development of critical thinking ([57]) and motivation ([58]), along with the digital literacy ([59]), though the evidence base remains limited and largely correlational, and positive outcomes depend on thoughtful, ethical implementation that preserves students' independent thinking. More recent randomised trials in secondary schools show that the same generative AI model can support or harm learning depending on how it is used: tools that give hints rather than answers, are aligned with the curriculum and are used under teacher guidance support learning, whereas unrestricted use as an answer generator can leave pupils performing worse once the tool is removed, often without them noticing ([60]). A recent ENESET review of 65 studies finds intelligent tutoring systems most consistently improve learning outcomes, mainly through timely feedback, adaptive sequencing and scaffolding, although benefits are neither automatic nor uniform and depend on how their use is embedded in teaching ([61]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Intelligent tutoring systems for early algebra with self-explanation from students	Math	Lower secondary	The tutor shows correct/wrong exercises. Students pick an operation and then a conceptual justification from menus.	Students using the self-explanation version (where they must justify each step before moving on) of intelligent tutoring	Low marginal cost at scale (software). CPD cost are however higher, but both necessary for effectiveness ([63]).

([53]) Amann, E., & Rzepka, S. (2023). The effect of goal-setting prompts in a blended learning environment—evidence from a field experiment. Economics of Education Review, 92, 102331. https://doi.org/10.1016/j.econedurev.2022.102331.

([54]) Compen, B., De Witte, K., & Schelfhout, W. (2020). The impact of teacher engagement in an interactive webinar series on the effectiveness of financial literacy education. British Journal of Educational Technology. https://doi.org/10.1111/bjet.13013.

([55]) Fälth, L., Gustafson, S., Tjus, T., Heimann, M., & Svensson, I. (2013). Computer-assisted interventions targeting reading skills of children with reading disabilities – A longitudinal study. Dyslexia, 19(1), 37–53. https://doi.org/10.1002/dys.1450.

([56]) Faber, Janke M.; Luyten, Hans; Visscher, Adrie J. The effects of a digital formative assessment tool on mathematics achievement and student motivation: Results of a randomized experiment. 2017. https://www.sciencedirect.com/journal/computers-and-education/vol/106/suppl/C.

([57]) Sardi, J., D., Candra, O., Yuliana, D., , H., Yanto, D., & Eliza, F. (2025). How Generative AI Influences Students' Self-Regulated Learning and Critical Thinking Skills? A Systematic Review. Int. J. Eng. Pedagog., 15, 94-108. https://doi.org/10.3991/ijep.v15i1.53379. Zhao, G., Sheng, H., Wang, Y., Cai, X., & Long, T. (2025). Generative Artificial Intelligence Amplifies the Role of Critical Thinking Skills and Reduces Reliance on Prior Knowledge While Promoting In-Depth Learning. Education Sciences.

([58]) Jauhiainen, J., & Guerra, A. (2023). Generative AI and ChatGPT in School Children's Education: Evidence from a School Lesson. Sustainability. https://doi.org/10.3390/su151814025.

([59]) Wu, D., & Zhang, J. (2025). Generative artificial intelligence in secondary education: Applications and effects on students' innovation skills and digital literacy. PLOS One, 20. https://doi.org/10.1371/journal.pone.0323349.

([60]) Bastani, H., Bastani, O., Sungu, A., Ge, H., Kabakcı, Ö., & Mariman, R. (2025). Generative AI without guardrails can harm learning: Evidence from high school mathematics. Proceedings of the National Academy of Sciences, 122(26), e2422633122.

([61]) Theis, D., Thomsen, M., Vogel, C., & Wasserfuhr, V. (2026). The impact of intelligent tutoring systems in general education (ENESET report). Publications Office of the European Union. https://doi.org/10.2766/0766181.

([63]) It was shown that the successful implementation of digital and blended pedagogical tools fundamentally depends on comprehensive teacher professional development. Recent systematic evidence shows that teachers who receive customised, hands-on training with ongoing mentorship demonstrate significantly

			The system requires a conceptual choice to proceed; immediate feedback and optional hints	systems learned more than problem-solving only; they also worked more efficiently ([62])	
Generative-AI tutors with pedagogical guardrails	Mathematics, Literacy (including second-language learning)	Lower secondary, Upper secondary	Tutor gives hints and prompts rather than answers, is aligned with the curriculum, teacher-mediated and with regular checks without AI. Structured access for low achievers.	A chatbot tailored to the Flemish economics curriculum, redirecting errors rather than giving solutions, raised task completion by 13.2 percentage points, while a generic chatbot built on the same model had no effect ([64]).	Low–Medium (licences, devices, CPD). Tools designed for learning may cost more than general-purpose ones
A whole-school, online digital formative assessment toolkit for teachers, leaders, students, and parents	Cross-curricular basic skills via improved formative assessment	Lower secondary	Self-guided role-specific pages with short explainers, scenarios, checklists, and planning tools. Schools had access for about **one term (~5 months)**.	Positive effects on teachers' objective digital formative assessment toolkit knowledge, including a better ability of distinguishing formative from summative assessment ([65]) .	Low direct cost; CPD integration needed
Adaptive learning platforms with teacher dashboards ([66])	Literacy, Mathematics	Primary, Secondary	Regular dashboard review; integration with lesson planning; teacher CPD	Positive effects on maths achievement in RCT evidence ([67])	Medium (platform licensing and CPD)
Media-literacy "prebunking"	Digital skills, citizenship skills (media and information literacy)	Lower secondary, Upper secondary	Short, active lessons (often a game or a series of brief videos) that	RCTs show pupils and young adults become better at spotting	Low marginal cost (free or low-cost tools and games); modest CPD

higher confidence and effectiveness in digital integration, with studies reporting that over 40% of teachers globally feel inadequately prepared for digital pedagogy without such support.

([62]) Vest, N.A., Silla, E.M., Bartel, A.N., Nagashima, T., Aleven, V., & Alibali, M.W. (2022). Self-Explanation of Worked Examples Integrated in an Intelligent Tutoring System Enhances Problem Solving and Efficiency in Algebra. Proc. 44th CogSci.

([64]) Polanco-Jimenez, J., & De Witte, K. (forthcoming). The tailoring premium: AI design, behavioral engagement, and human capital formation [Preprint]. SSRN. https://doi.org/10.2139/ssrn.6110192.

([65]) FBK IRVAPP. "Assess@Learning," February 6, 2023. https://irvapp.fbk.eu/projects/detail/assesslearning/.

([66]) Software that adapts exercise difficulty to each pupil in real time and gives teachers a dashboard to target support (e.g. ASSISTments, DreamBox). Used in regular lessons, with CPD on acting on the data.

([67]) Roschelle, J., Feng, M., Murphy, R.F., & Mason, C.A. (2016). Online Mathematics Homework Increases Student Achievement. AERA Open, 2(4), 1–12. https://doi.org/10.1177/2332858416673968.

Inoculation against online manipulation			expose pupils in advance to the techniques behind misleading content, such as emotional manipulation, false dilemmas, scapegoating, and fake experts, so they learn to recognise the technique rather than fact-check each claim. Delivered in regular lessons; light teacher CPD to run the activity and debrief.	manipulation techniques in online content, with effects that persist for at least several weeks. Evidence is strongest for recognising manipulation; transfer to changed everyday sharing behaviour is less established. ([68])	
Open classroom discussion (digitally supported)	Citizenship skills	Lower secondary, Upper secondary	Structured open discussion of social and civic issues, supported by digital deliberation tools. Teachers create an "open classroom climate" where pupils regularly discuss social, ethical, and political questions, expressing and defending differing views under structured ground rules. Digital tools (shared deliberation boards, anonymous polling, structured-argument platforms) can widen participation and surface quieter voices.	Large international assessments consistently associate an open classroom climate with higher civic knowledge and stronger intentions to participate (however, evidence is correlational at scale rather than from controlled trials ([69]) and normally does not account for the use of digital tools).	Low (mostly pedagogical; optional low-cost digital tools); CPD on facilitation

([68]) Roozenbeek, J., van der Linden, S., Goldberg, B., Rathje, S., & Lewandowsky, S. (2022). Psychological inoculation improves resilience against misinformation on social media. Science Advances, 8(34). https://doi.org/10.1126/sciadv.abo6254; Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. Palgrave Communications, 5, 65. https://doi.org/10.1057/s41599-019-0279-9.

([69]) Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., & Friedman, T. (2018). Becoming Citizens in a Changing World: IEA ICCS 2016 International Report. IEA/Springer. https://doi.org/10.1007/978-3-319-73963-2; Campbell, D.E. (2008). Voice in the classroom: How an open classroom climate fosters political engagement among adolescents. Political Behavior, 30, 437–454. https://doi.org/10.1007/s11109-008-9063-z.

			Requires teacher CPD on facilitating respectful disagreement.		

Examples from Member States and beyond

- **Estonia – Systemic digital integration:** High digital infrastructure and competence underpin schools' use of adaptive tools and data to support basics. *(Digital Skills & Jobs Platform. Estonia – Education Strategy 2021–2035. 2021–).* Teachers use platform data (attendance, tasks, marks, notes) to flag students above/below benchmark and adapt instructions. The AI Leap starting in 2025 is part of this strategy and includes a phased access to AI-powered learning tools with a strong focus on teacher training (3000 teachers trained).

- **Netherlands – National Education Lab AI (NOLAI):** National education lab for AI, developing trials on responsible, pedagogically grounded AI together with schools (primary, secondary and special education) and EdTech partners. NOLAI co-creates and evaluates classroom-ready AI tools (e.g., adaptive practice, feedback and dashboarding) through school-based pilots. It helps build a national ecosystem linking teachers, researchers and companies with a strong focus on ethics, data governance and professional learning.

- **Slovakia – Digital teacher competence:** Targeted investment in teacher continuing professional development (CPD) to build teachers' capacity to guide pupils in the responsible, safe, and critical use of digital tools, not only their operational use. The rationale is that pupils are often fluent in *using* digital tools but much weaker at evaluating sources, managing data and privacy, and recognising manipulation online, while many teachers report low confidence in teaching these critical-use competences. CPD is structured around a recognised teacher digital-competence framework (the European DigCompEdu framework), giving schools a common reference point for what teachers should be able to do and a basis for progression.

Risks and how to manage them

- **Repetition and memorisation without understanding:** platforms can lead students to perform correctly without genuine comprehension; this requires tools that promote self-explanation and higher-order thinking.
- **Over-reliance**: digital tools accelerate the teaching cycle; they do not replace it; genuine learning requires meaningful teacher–student interaction.
- **Equity:** tools can widen gaps if disadvantaged schools or students lack devices, connectivity, or home support; address infrastructure before adoption. Equitable provision requires more than access: unstructured, voluntary use of AI tutors tends to benefit stronger learners and can harm those who most need support, whereas structured, scaffolded access can yield the largest gains for low achievers.
- **Ethical governance:** any AI-powered tool requires a school or system-level framework addressing data privacy, algorithmic transparency, and safeguards against bias.
- **Cognitive offloading with AI tools:** AI can support learning by freeing attention for more complex tasks, but it can also reduce the effort needed for lasting learning if pupils outsource core thinking. To mitigate this, design tasks where AI supports the process but pupils must still explain, justify and demonstrate.
- **Misleading success indicators:** with AI tools, high usage and satisfaction can coexist with weak learning, and pupils often overestimate what they have learned; judge tools by what pupils can do without AI support.

3. Assessment and screening



What it is

Systematic tools and practices that help teachers and schools identify where individual learners are in their basic skills development. This includes diagnostic screening at key points, assessment for learning (AfL) in everyday teaching, ipsative (self-referenced) assessment, and structured observation frameworks in early childhood education and care (ECEC). However, these are valuable only if they are then acted upon to adjust teaching and learning activities and/or provide timely and appropriate targeted support for learners.

Besides identifying learners at risk of underachievement, these methods also reveal learners already working well beyond expected levels. Systematic and continuous identification tools are important because high potential can be easily missed, especially among disadvantaged and twice-exceptional learners (learners who are gifted but also have learning difficulties).



How to put it in practice

Strong assessment systems combine universal screening (brief checks applied to all learners, not only those already identified as struggling), with ongoing formative assessment to provide timely information about learners' progress. When linked to clear support pathways, they enable schools and education systems to identify needs early and respond before learning gaps widen. The same data are the foundation of early warning systems for early leaving: closely monitoring attainment, attendance and behaviour allows schools to act on disengagement before it hardens into drop-out. Prior absence is one of the strongest predictors of later absence and of early leaving, so attendance patterns should be reviewed as regularly as attainment data[70].

System / Ministry level	School level
Provide validated diagnostic and formative tools and digital/computer adaptive testing platforms, including initial-assessment tools for newly arrived learners that can be used in their first language, and fund the infrastructure, teacher training and technical support needed to run them.	Run universal diagnostic checks for all students at key entry and transition points (end of ECEC, school entry, primary to secondary and lower-secondary to upper-secondary transitions, start of VET programmes, etc.). Additionally, conduct targeted checks at the start of each school year for students already identified as being at risk or as having previously unmet support needs.
Define national or regional milestones for universal diagnostic checks (end of ECEC, school entry, primary to secondary and lower-secondary to upper-secondary transitions, start of VET programmes, etc.).	In ECEC, use structured observation frameworks embedded in everyday activities rather than formal tests: observation captures language, early numeracy, digital play, and social-emotional development without the distortions that formal testing introduces at this age. ([71])
Use aggregated diagnostic data to identify schools or cohorts requiring targeted system-level support, and build this into funding allocation decisions.	For newly arrived pupils, assess prior learning, particularly literacy and mathematics, separately from their proficiency in the language of schooling. Where necessary,

([70]) OECD (2026), Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems, OECD Publishing, Paris, https://doi.org/10.1787/7c6f6c3e-en.

([71]) For example, observe language, early literacy, numeracy, digital play, and social-emotional development in everyday activities.

	assessments can be done in pupils' home language with support from interpreters or cultural mediators. This ensures that class placement and support are based on pupils' existing knowledge and skills, rather than their proficiency in the language of schooling, and that language barriers do not hinder their learning.
	Build short formative checks into daily teaching: exit tickets (a quick question answered at the end of a lesson to assess understanding), peer assessment, targeted questions, brief written tasks (assessment for learning).
	Ensure every screening has a clear follow-up pathway: who gets the data, what support is triggered, and when.
	Dedicate regular protected time for teachers to review diagnostic data together and agree on instructional responses



Evidence at a glance

Research shows that **early diagnostic screening** for literacy and mathematics, when followed by timely intervention, can produce moderate to strong gains in reading fluency and number sense (around +0.2–0.4 SD). ([72]) In **ECEC**, where formal testing is unsuitable, structured **observation-based assessment**, supported by practitioner training, improves educators' responsiveness and children's early language, numeracy, and socio-emotional outcomes. ([73]) More broadly, **assessment for learning (AfL)** practices such as formative feedback, self- and peer assessment, and dialogue are consistently linked to higher achievement in literacy, mathematics, and science. ([74])

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Diagnostic screening	Literacy, Mathematics, Science	Primary, Lower Secondary	Universal tools at key stages; clear referral and tiered support pathways; teacher training on data use	Early screening linked to significant gains when paired with intervention (+0.2–0.4 SD)	Medium (costs for tools & training; scalable if integrated nationally)

([72]) January, S. A. A. & Klingbeil, D. A. (2020). Universal screening in grades K–2: A systematic review and meta-analysis of early reading CBM tools. Journal of School Psychology, 82, 103–122.

([73]) OECD (2020). Starting Strong VI: Supporting meaningfully inclusive ECEC. Anders, Y., et al. (2013). Preschool and primary school influences on early numeracy in Germany.

([74]) E.g., Black, Paul; Wiliam, Dylan. Developing the Theory of Formative Assessment. 2009. https://doi.org/10.1007/s11092-008-9068-5. Kingston, Neal; Nash, Brooke. Formative Assessment: A Meta-Analysis and a Call for Research. 2011. https://doi.org/10.1111/j.1745-3992.2011.00220.x. Education Endowment Foundation. Teacher Feedback to Improve Pupil Learning (Guidance Report). 2021. https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/feedback.

Observation-based assessment	Early literacy, mathematics, scientific reasoning, socio-emotional foundations	ECEC	Develop-mentally appropriate observation frameworks; embedded in daily practice; professional development for practitioners	Improves early identification and responsive pedagogy; reduces later referral rates	Low–Medium (requires staff training & coaching; minimal testing costs)
Assessment for Learning practices (AfL)	Literacy, Mathematics, Science, Digital & Citizenship competence	Primary, Lower & Upper Secondary, VET	Formative feedback, peer/self-assessment, use of learning analytics; linked to curriculum goals	Improves outcomes across subjects	Low–Medium (mainly training and tools; tech costs if digital)
Computer Adaptive Testing (CAT)	Literacy, Mathematics	Primary, Secondary	Digital infrastructure; teacher continuous professional development (CPD); clear follow-up protocols	Stronger diagnostic precision than fixed-format tests; requires infrastructure	Medium (infrastructure and CPD)

Examples from Member States and beyond

- **France –National progress/review assessment of learning outcomes** (*Évaluation des acquis et bilan*) ([75]) and Pix. Annual standardised diagnostic assessments in French and maths from primary through lower secondary, with results returned to teachers within approximately 48 hours via the Reperes portal. A large majority of responding teachers say the evaluations influence how they organise needs-based support groups. ([76]) For digital skills, the national Pix platform (built on the European Digital Competence Framework [DigComp]) assesses, develops and certifies students' competences, and is now being adapted for other EU systems through the Erasmus+ DigiCLASS project (pilots in Austria, Italy and Spain) ([77]).

- **Portugal – Plano 21|23 Escola+:** Schools equipped with assessment tools to build their own evaluation capacity. An exploratory study found schools implementing multiple recovery actions achieved above-expected results with statistically significant improvements in attainment. ([78]) ([79]).

- **Germany (Lower Saxony)**: An outcome-oriented observation framework in development (with EU Technical Support Instrument support until 2026) to guide practitioners in

([75]) Ministère de l'Éducation nationale. Évaluations nationales https://www.education.gouv.fr/l-evaluation-des-acquis-des-eleves-du-cp-au-lycee-12089.

([76]) DEPP Technical Report "Évaluations 2023 Repères CP-CE1" (threshold methodology; teacher/inspector surveys). https://www.education.gouv.fr/media/158874/download. Process indicators from post-wave surveys: timeliness/utility of restitutions; effects on grouping, differentiation, and training/pilotage.

([77]) Pix, "Pix at the heart of a European project to harmonise digital skills assessment in schools." https://pix.org/en/news/digiclass-european-project-assessment-digital-skills-schools/ ; DigiCLASS project Search - Erasmus+, project reference 101259887, ALL DIGITAL. https://all-digital.org/projects/digiclass/.

([78]) Fourth Monitoring Report (synthesis of the 2021–2023 cycle). https://escolamais.dge.mec.pt/sites/default/files/2023-06/IV_Relatorio_Monitorizacao_Plano_21-23_Escola_2023_06_30.pdf.

([79]) Verdasca, J. (coord.) et al. (August 2023). Plano 21|23 Escola+ | Estudos amostrais exploratórios: ensino secundário. Centro de Investigação em Educação e Psicologia, Universidade de Évora. Recuperado de https://escolamais.dge.mec.pt/sites/default/files/2023-09/EstudosAmostraisExploratoriosSecundario_15_09_2023.pdf.

structured, play-based observation of language, emergent literacy, numeracy, digital play, and social-emotional skills. ([80]) ([81])

- **Norway – Teacher-led mapping/assessment tests:** An ongoing initiative developing new forms of learning and needs assessment that provide information primarily for teachers rather than for system-level reporting – explicitly designed to strengthen the teacher–student relationship.

Risks and how to manage them

- **Fair and unbiased screening and assessment:** that should measure learning, not background; ensure language, culture, disability or socio-economic status do not advantage or disadvantage learners; applying universal design for learning principles helps build fairness also in assessment and learning needs identification processes. For newly arrived learners and learners with different home languages, limited proficiency in the language of schooling should not be mistaken for low academic ability or special educational needs.
- **Widening equity gaps:** if disadvantaged schools lack capacity to act on data, screening widens rather than closes gaps; targeted CPD and fair funding should accompany any diagnostic assessment tools investment.
- **Labelling:** screening should support and not stigmatise; positive framing and clear communication with families are essential.
- **Adding workload:** digital diagnostic assessment tools should reduce, not add to, administrative burden.
- **Data without action:** data has to be collected in view of being used and guiding concrete action; every screening must have a pathway from results to support.

4. Targeted tutoring and mentoring for underachieving learners



What it is

High-intensity, in-school tutoring ([82]) (1:1 or very small group) in reading or mathematics, multiple sessions per week; or school-run homework/mentoring ([83]) support. The provision of quality tutoring and mentoring support by schools, that all students who can benefit from can access, is essential to overcome inequalities in basic skills achievement. In many contexts, the absence of targeted tutoring and mentoring in school is compensated by private providers, rendering access to such essential support dependant on the family's economic capacity, further aggravating existing gaps between disadvantaged and well-off learners.

Both tutoring and mentoring give underachieving learners more instructional time and closer attention, directly targeting the gaps holding them back. This can be particularly relevant also for top performers, allowing them extra time and support to develop skills beyond what is being taught

([80]) Lower Saxony education portal hub for the TSI project: https://bildungsportal-niedersachsen.de/fruehkindliche-bildung/veranstaltungen/tsi.
([81]) European Commission (DG REFORM). (2023). Building a framework for outcome-oriented early childhood education and care (Lower Saxony, Germany). Technical Support Instrument project summary. Retrieved from https://reform-support.ec.europa.eu/what-we-do/skills-education-and-training/building-framework-outcome-oriented-early-childhood-education-and-care_en.
([82]) Tutoring refers to direct, subject-specific academic instruction focused on particular learning gaps.
([83]) Mentoring encompasses broader support including study skills, motivation, organisation, and social-emotional guidance alongside academic support.

in the classroom. Moreover, in cross-age or peer mentoring schemes, the higher-achieving mentors themselves benefit from the activity of supporting other peers, further solidifying their knowledge.



How to put it in practice

Effective tutoring is short, frequent, and closely aligned to classroom work. Three or more short sessions per week (20–30 minutes) over several months produce stronger results than longer, less frequent sessions over a shorter time span.

System / Ministry level	School level
Fund and target tutoring centrally, so it reaches every school and pupil that needs it and provision does not depend on a school's own budget.	Use diagnostic data to identify the pupils who will benefit most. **see Measure 3**
Set quality standards — dosage, tutor qualifications, alignment to the curriculum — and fund tutor training and coaching.	Run short, frequent sessions (three or more per week, 20–30 minutes) aligned to classroom content.
	Keep tutoring groups temporary and flexible, avoiding permanent 'low-ability' labels or tracks.
	Complement tutoring with adaptive digital tools between sessions. **see Measure 2**



Evidence at a glance

Multiple systematic reviews show that well-implemented tutoring produces large effects on literacy and mathematics ([84]). Effects are strongest in early-grade literacy and mathematics. Cross-age and peer mentoring show moderate academic gains, primarily in reading and mathematics ([85]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Tutoring	Literacy, Mathematics	Primary, Lower & Upper Secondary	Trained tutor; 3+ sessions/week; data-driven targeting; curriculum alignment	High. Multiple studies have shown that tutoring has statistically significant positive effects on reading fluency, reading comprehension, and	High per pupil; Teachers assistants reduce cost but typically smaller effects

([84]) Typically +0.3-0.5 SD within a school year, the equivalent of moving a student from the 50th to near the 65th percentile. E.g., Nickow, Andre; Oreopoulos, Philip; Quan, Vincent. The Impressive Effects of Tutoring on PreK–12 Learning. 2020. https://www.nber.org/papers/w27476.

([85]) Chang, A., Mauer, E., Wanzek, J. et al. Examining the Academic Effects of Cross-age Tutoring: A Meta-analysis. Educ Psychol Rev **37**, 19 (2025). https://doi.org/10.1007/s10648-025-09997-z.

				mathematics calculation ([86])	
Homework clubs/Structured homework support	Literacy, Math, Science, Digital	Primary, Lower & Upper Secondary	Qualified supervisors; regular schedule; links to class assignments	After-school programs with academic components show positive effects on achievement, reporting improved homework completion rates and school engagement, with particular benefits for disadvantaged students lacking home support structures ([87]).	Medium cost (leverages existing facilities)
Cross-age / peer mentoring	Literacy, Math	Primary, Secondary	Adult supervision; mentor training; clear role definition	small to moderate positive effect on academic outcomes for both tutors and tutees	Low (peer time; facilitation needed)

Examples from Member States and beyond

Spain – PROA+ (Primary & Secondary): School-based tutoring and academic support for educationally vulnerable students, scaled through funding from the Recovery and Resilience Facility (RRF) and the European Social Fund Plus. Evaluation of the predecessor programme, PROA, found consistent positive contribution to study habits, educational expectations, and basic skills. ([88])

France – *Devoirs faits* (Lower secondary): Free, on-site, scheduled homework support in colleges. Preliminary evaluation found high relevance and positive perception among students, parents, and teachers; seen as a key equity measure providing structured homework time for students who lack this at home. ([89])

Netherlands – *Nationaal Programma Onderwijs* (Primary & Secondary): A flexible, menu-based approach giving schools funded access to evidence-based options including tutoring and small-group instruction. Empowers school-level decision-making while directing funds to proven strategies.

Croatia – In-school supplementary support: Schools fund 1–2 hours of extra teacher time per week for underachieving students; in-school.

([86]) For more information: https://op.europa.eu/en/publication-detail/-/publication/f1309d68-4f56-11ed-92ed-01aa75ed71a1.

([87]) Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. American journal of community psychology, 45(3), 294-309. https://doi.org/10.1007/s10464-010-9300-6.

([88]) Manzanares Moya, A., & Ulla Diez, S. (2012). National Evaluation of the PROA Programme for Reinforcement, Support and Guidance. Analysis After Six Years of Continued Assessment. REVISTA DE EDUCACION, 89-116.

([89]) Inspection Générale de l'Education, du Sport et de la Recherche, Ministère de l'éducation nationale (2020a). Mission de suivi et d'observation de la mise en œuvre des réformes en cours Devoirs faits Note d'étape (août 2020). [Rapport à monsieur le ministre de l'éducation nationale et de la jeunesse]. https://www.education.gouv.fr/mise-en-oeuvre-des-reformes-en-cours-devoirs-faits-note-d-etape-aout-2020-306400.

Risks and how to manage them

- **Cost:** high-dosage tutoring is among the most effective short-term measures but also one of the most expensive, straining school budgets; keep provision sustainable through cost-effective formats (small-group rather than one-to-one where appropriate, peer and cross-age models), phased roll-out, and prioritising the highest-need learners. At the same time, evidence suggests that technology can also benefit teachers. When learners alternate between in-person tutoring and AI-assisted learning ([90]), teachers may gain additional time for other pedagogically relevant tasks. However, AI-assisted learning should complement tutor guidance, and not replace human tutor guidance. Teachers hence need to be trained to understand the pedagogical potential and limitations of AI for learning, enabling them to guide learners more effectively and ensure that these technologies enhance, rather than replace human teaching.
- **Equity**: well-resourced schools can fund better tutoring than under-resourced schools (which serve the most disadvantaged students) ; central targeting of funding to vulnerable groups is essential, to ensure that the budgetary limitations of their schools do not hinder them from benefiting from tutoring and mentoring.
- **Stigma:** keep groupings temporary and flexible; avoid permanent 'remedial' labels.
- **Overload:** more instruction time does not automatically mean better learning. Adding sessions on top of a full school day can cause fatigue. Three or more short sessions per week is the threshold at which meaningful gains are typically achieved; beyond that, the evidence on optimal upper limits is limited. Ensure students retain time for rest and self-directed activity, both of which support memory consolidation.
- **Quality of peer tutors:** peer and cross-age programmes require careful adult oversight; students cannot substitute for trained teachers.

5. Additional learning time, enrichment and catch-up formats



What it is

Short-term, intensive learning opportunities that give students extra time to master core skills. These include holiday or summer schools, extended school days or weeks, timetabled "catch-up blocks" within the school year, and structured peer-support or study groups. They aim to close immediate learning gaps in literacy, mathematics, scientific reasoning, digital competence, and citizenship understanding, particularly for students most affected by disruption or disadvantage. The same formats can be adapted to top performers, in which case additional time should be used for greater depth, challenge and learning enrichment rather than repetition, while ensuring access to additional time for these learners does not depend on family resources.



How to put it in practice

Extending learning time can help accelerate progress in basic skills when support is targeted, high-quality, and aligned with learners' identified needs and the core curriculum.

([90]) Wang, R. E., Ribeiro, A. T., Robinson, C. D., Loeb, S., & Demszky, D. (2025). Tutor CoPilot: A human-AI approach for scaling real-time expertise (EdWorkingPaper No. 24-1056). Annenberg Institute at Brown University. https://doi.org/10.26300/81nh-8262.

System / Ministry level	School level
Fund intensive provision schemes (e.g. four-to-five summer schools dedicated to certain basic skills).	Use diagnostic data to target the pupils who most need additional instruction time.
Ensure effective access for the most disadvantaged students to such schemes by providing free access, meals and transport.	Keep programmes intensive and well-structured, with qualified staff and clear links to the classroom curriculum.
Encourage schools running additional learning time to connect it explicitly to their improvement priorities, so it reinforces rather than runs parallel to core classroom teaching.	Run active outreach to disadvantaged families so the pupils who would benefit most actually attend.
	Design enrichment and catch-up activities that develop more than one skill at a time; for example, reading tasks that use digital sources, or mathematics exercises that connect to civic or real-world contexts.



Evidence at a glance

Research on extended learning time shows that well-designed programmes can have a significant positive impact on student achievement. A comprehensive 2019 review on summer learning programmes found that effective programmes can not only prevent the "summer slide" (i.e., the learning loss that disproportionately affects students from low-income backgrounds) but can also produce meaningful academic gains. The review highlighted the importance of high attendance, high-quality instruction, and sufficient duration (at least five weeks). ([91]) Similar findings are echoed in OECD reviews on learning recovery (in the context of COVID-19 learning losses) ([92]). Structured peer tutoring and study clubs, when supported by teacher oversight, have also shown positive effects on literacy, mathematics and science. ([93])

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Holiday / summer schools	Literacy, Mathematics, Digital, Science, Citizenship	Primary, Lower Secondary	At least 4–5 weeks; high-quality instruction; strong attendance incentives (meals/transport); alignment with diagnostic data	Well-designed summer programmes prevent learning loss and can deliver meaningful gains in reading and maths, especially for disadvantaged learners, when attendance is high, instruction is high-quality, and duration is ≥5 weeks. ([94])	Medium–High cost (staff salaries and logistics; funding support often required)

([91]) McCombs, Jennifer S. et al. Getting to Work on Summer Learning. RAND, 2019. https://www.rand.org/pubs/research_reports/RR366-1.html.
([92]) OECD (2023). Strengthening learning recovery through targeted support.
([93]) Education Endowment Foundation (EEF). Peer tutoring – Teaching and Learning Toolkit 2021.
([94]) McCombs, Jennifer S. et al. Getting to Work on Summer Learning. RAND, 2019. https://www.rand.org/pubs/research_reports/RR366-1.html.

Extended school day / week	Literacy, Mathematics, Science	Primary, Lower Secondary	Integration into timetable; clear learning goals; qualified staff; fair compensation	small but positive effects on achievement when extra time is tightly focused on core learning and taught by qualified staff ([95])	Medium cost (uses existing infrastructure but adds staff hours)
Timetabled catch-up blocks	Literacy, Mathematics,	Primary, Lower Secondary	Flexible groupings; data-driven targeting; short intensive cycles	The Education Endowment Foundation Teaching and Learning Toolkit (Small Group Tuition strand): average +4 months' progress over a year. Smaller groups produce stronger effects. Short, frequent sessions more effective than longer, infrequent ones. Evidence security: moderate (i.e. a reasonably solid evidence base, on the Education Endowment Foundation's rating of evidence robustness) ([96]) .	Moderate cost; requires dedicated staff time beyond normal classroom teaching; cost-effectiveness improves when teaching assistants are deployed with proper training

Examples from Member States and beyond

- **Netherlands – NP Onderwijs Zomerscholen:** As part of the Nationaal Programma Onderwijs, the Netherlands explicitly included summer schools (zomerscholen) on its national offer of measures for academic recovery. This provided schools with a funded mechanism to offer intensive literacy and maths support during the summer holidays, directly targeting learning loss ([97]). Evidence of effectiveness: System-level monitoring reports show that by 2022/23 primary-school learning growth had on average returned to pre-pandemic levels, though results vary by year group and this cannot be attributed to any single measure ([98]). The evidence base the programme draws on indicates small-to-moderate gains from well-designed summer schools, especially when intensive and delivered in small groups/1:1, while lighter variants show weaker effects ([99]).

([95]) OECD (2023). Strengthening learning recovery through targeted support.
([96]) Education Endowment Foundation (EEF). (2025). Small group tuition. Teaching and Learning Toolkit. https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/small-group-tuition.
([97]) Intervention on the NPO "menukaart" (summer/spring schools) Nationaal Programma Onderwijs (NPO). (n.d.). Zomer- of lentescholen (interventiepagina). Retrieved October 10, 2025, from https://www.nponderwijs.nl/interventies/z/zomer--of-lentescholen.
([98]) Rijksoverheid (OCW). (2023, November 28). Bijlage 1: Vijfde voortgangsrapportage NP Onderwijs (studiejaar 2022–2023). https://www.rijksoverheid.nl/documenten/rapporten/2023/11/28/bijlage-1-vijfde-voortgangsrapportage-np-onderwijs.
([99]) Education Endowment Foundation (EEF). (2025, May—last updated). Teaching and Learning Toolkit: Summer schools. https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/summer-schools.

- **Italy – Piano Scuola Estate:** The Ministry's 2021 "Piano Scuola Estate – un ponte per il nuovo inizio" funded schools to run summer learning - intensive Italian (literacy), mathematics and digital labs alongside well-being/civic activities, via a dedicated circular and guidance; initial funding totalled ~€510–520m ([100]). Summer/spring offerings were later re-opened under the National Programme 2021–2027 (PN Scuola e Competenze), with an official call supporting activities in the 2023/24–2024/25 summers. There is no national causal impact study isolating the plan's effect on learning; outcome evidence is mainly local (school/municipal) and from broader system indicators (e.g., INVALSI trends reported separately) ([101]).

- **Finland – Local recovery funding:** In 2022–2024 the Ministry of Education and Culture (OKM) provided a special state grant (≈€58 m) to municipalities/organisers of ECEC and basic education to mitigate pandemic effects on learning and well-being. Eligible uses for basic education explicitly included *tukiopetus* (remedial/extra teaching), part-time special education, strengthened guidance, S2 language support, and actions to mitigate absence/drop-out, with local discretion on timing (including outside regular hours) ([102]). There is no national causal impact study isolating the effect of these local measures; the Government/OKM tracked allocation and uptake (298 organisers; €57,986,689 granted) and gathered feedback that additional resources were perceived to support learning and well-being ([103]).

- **Georgia – Digital catch-up for out-of-school children:** Innovative catch-up activities using tools such as Minecraft for science learning demonstrate how digital tools can make additional learning time accessible and engaging for hard-to-reach groups.

Risks and how to manage them

- **Participation barriers:** ensure no-cost access, meals, and transport; conduct active outreach to the most disadvantaged families.
- **Quality at scale**: smaller, well-designed programmes consistently outperform larger, under-resourced ones.
- **Well-being:** cap additional weekly hours; rest and unstructured time are necessary for consolidating learning.
- **Standalone risk:** programmes that run parallel to, rather than reinforcing, core classroom teaching deliver weaker results.

([100]) Ministero dell'Istruzione (2021). Piano Scuola Estate 2021 – un ponte per il nuovo inizio.
([101]) Ministero dell'Istruzione – Dipartimento per le risorse umane, finanziarie e strumentali, Direzione generale per i sistemi informativi e la statistica (DGSIS). (10 November 2021). Oggetto: richiesta compilazione rilevazione nazionale relativa alla rendicontazione del Piano Scuola Estate (circolare firmata dal Direttore Generale Gianna Barbieri). Available at: https://www.orizzontescuola.it/wp-content/uploads/2021/11/monitoraggio_10_11_2021.pdf.
([102]) Finnish National Agency for Education (2022). State grants to mitigate the effects of the pandemic on learning and well-being.
([103]) Opetus- ja kulttuuriministeriö. (2022, October 26). Koronaepidemian vaikutusten tasoittamiseen varhaiskasvatuksessa sekä esi- ja perusopetuksessa 58 miljoonaa [Tiedote]. Valtioneuvosto. https://valtioneuvosto.fi/-/1410845/koronaepidemian-vaikutusten-tasoittamiseen-varhaiskasvatuksessa-seka-esi-ja-perusopetuksessa-58-miljoonaa.

6. Addressing non-academic barriers through cross-sector support



What it is

Removing the non-academic barriers that prevent children from engaging with and benefiting from education. Socio-economic disadvantage, poor digital well-being, physical and mental health issues, family stress, housing instability, disruption such as interrupted schooling and trauma caused by migration or displacement, inadequate nutrition, physical inactivity or excessive sedentary behaviours are all factors contributing to the acquisition of basic skills directly or indirectly. Schools cannot tackle all of these alone, but they can be the hub that connects children and families to the right support.

Poor school attendance is often the first visible sign of these barriers. School attendance problems have increased in many education systems, particularly since the pandemic, and the most vulnerable learners frequently face the greatest barriers to regular attendance[104]. Absence has many interacting causes at individual, family, school and community level. Illness is the most commonly reported reason for long-term absence, and mental-health difficulties can lead to anxiety-based avoidance that turns short spells of absence into persistent non-attendance. Bullying, weak school–family communication and fragmented support also contribute[105]. Absence is also concentrated in disadvantaged schools: in Ireland, chronic absence (missing 20 or more days a year) is higher in schools serving disadvantaged communities, and attendance in these schools has recovered more slowly since the pandemic[106]. Absence matters for basic skills: it is associated with weaker development of foundational skills in primary education and lower attainment later. Attendance should therefore be treated as a signal of unmet needs to be understood and addressed, not only as a matter of compliance.

Specifically concerning digital challenges, exposure to harmful or age-inappropriate content, addictive design, cyberbullying and online sexual abuse can affect minors' mental health, sleep and concentration and, consequently, their learning ([107]). As a hub, the school's role is to help identify these harms early and connect children and families to available support (as, for example, national Safer Internet Centres and helplines).



How to put it in practice

Effective support for learners with complex needs requires close collaboration and structured partnerships between schools and specialist services (health and social services, community organisations), with clear referral pathways, coordinated interventions and a shared focus on the learner's success and well-being.

System / Ministry level	School level
Start by convening the people who already hold the relevant budgets and referral powers across health, social services and education, even informally, so that funding	Appoint a named key worker for each high-need pupil who coordinates support and stays the single point of contact for the pupil, teachers and parents.

([104]) OECD (2026), Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems, OECD Publishing, Paris, https://doi.org/10.1787/7c6f6c3e-en.

([105]) OECD (2026), Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems, OECD Publishing, Paris, https://doi.org/10.1787/7c6f6c3e-en.

([106]) Smyth, E., Moya, A. and Darmody, M. (2026), The long-term outcomes of school absence, ESRI Research Series No 220, Economic and Social Research Institute, Dublin, https://doi.org/10.26504/rs220.

([107]) As per the conclusion of: Fegert, J. M., & Melchior, M. (2026). Child safety online: Protecting and empowering minors in a digital world — Report by the Co-Chairs of the Special Panel on Child Safety Online. European Commission.

and referral routes stop working at cross purposes. Formal cross-sector governance can follow, but a standing coordination group is the quick first move.	Run short, time-limited support plans (around a term) with clear goals, shared with teachers and parents and reviewed at the end.
Treat professional capacity as the binding constraint: map where mental-health, psychology and allied-professional shortages are tightest ((including interpreters, intercultural mediators and staff trained to support newly arrived and trauma-affected learners), and direct early investment there, since school-level access and referral pathways stall without it.	Build teacher awareness through brief, regular CPD on spotting non-academic barriers (attendance, health, home circumstances), and identifying online-safety concerns such as signs of cyberbullying, problematic or excessive use, online exploitation or radicalisation. Ensure that teachers are aware of the school's referral routes.
Where capacity exists, co-locate it: giving schools in-school or nearby access to these professionals lets them act as service hubs rather than only referring pupils out and waiting. This can begin with shared or visiting staff before any permanent in-school posts.	Map and publicise what's already accessible: which psychologist, speech therapist, social worker or health contact pupils can reach, and how teachers refer (Often these exist but aren't visible to staff.)
Guarantee at least one free, healthy meal every school day for children in need, as the European Child Guarantee requires.	Check that children entitled to free meals actually receive them (entitlement and take-up are not the same).
Establish a shared definition of attendance problems and timely, pupil-level attendance data that schools can act on quickly, while keeping reporting burden low. Prioritise supportive, needs-based responses over purely sanctions-based ones.	For newly arrived pupils, combine intensive language support with early participation in mainstream classes, starting with subjects that are less language dependent. Ensure access to psychosocial support and use intercultural mediators or bilingual assistants to facilitate communication with pupils and their families.
	Monitor attendance continuously and act early. Contact families quickly after unexplained or repeated absences, talk with the learner and family to identify the barrier, and agree a short individual attendance plan linked to the key worker and the support plan above. When learners return after an absence, plan their re-integration: catch-up support (see Measures 3 and 4), a check on their well-being and peer relationships, and, for learners with longer-term medical conditions, continuity of learning while they are absent (including through remote options).



Evidence at a glance

Reviews and recent studies confirm that school-based health centres (SBHCs) consistently improve access to care and student attendance, especially for underserved populations. However, academic impacts are mixed and often depend on programme design and implementation context ([108]). Emerging evaluations of integrated student supports/community schools show implementation gains and attendance benefits where health services are robust, while average test score effects are small or mixed across contexts.

Evidence on attendance interventions specifically is still developing. A rapid evidence assessment of 72 studies found that the overall quality of evidence is weak. The most promising approaches are parental communication and engagement, and responsive interventions that identify and address the individual causes of a learner's absence. Evidence for mentoring, behaviour interventions, meal provision, incentives and disincentives, and extracurricular activities is mixed[109]. Multi-tiered

(108) Arenson, M., Hudson, P., Lee, N., & Lai, B. (2019). The Evidence on School-Based Health Centers: A Review. Global Pediatric Health, 6. https://doi.org/10.1177/2333794X19828745.

(109) Education Endowment Foundation (2022), Attendance Interventions: Rapid Evidence Assessment, Education Endowment Foundation, London.

systems of support, combining school-wide practices with targeted and intensive individual interventions, are recommended in recent international guidance[110].

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
School-based health & well-being hubs	Core skills; SEL	Primary, Secondary	On-site/linked services; consent/data protocols; case management	Associated with better attendance; academic effects mixed, depend on intensity/integration.	Medium–High (staff/partnership costs)
Provision of school meals for children in need	All skills	All	Statutory entitlement and binding nutrition standards; universal or school-level rather than individually means-tested provision, to avoid stigma and non-take-up; kitchen/canteen capacity and trained catering staff.	Evidence on the beneficial effects of school meals provision is clear, leading to decreased socio-economic inequality, substantial gains in educational attainment and even higher income levels later in life ([111]).	Low (in proportion to the budget devoted to primary and secondary education, the finance needed to provide school meals to all children at risk of poverty represents less than 2% in most EU Member States[112]).
School-embedded social work ([113])	Literacy/mathematics participation; citizenship competences	Primary, Secondary	Outreach for chronic absence; benefits sign-posting; multilingual mediation	Attendance & engagement improvements where outreach is systematic; test score effects context-dependent. ([114])	Medium, cost-effective when teams are shared across schools and include paraprofessional roles
Health & science learning link-ups	Science inquiry	Lower & Upper Secondary, VET	Partnerships with clinics/universities; project-based STEM on health topics	Integrated STEM projects show positive average effects on achievement with strong teacher guidance. ([115])	Low–Medium (materials, coordination)

([110]) OECD (2026), Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems, OECD Publishing, Paris, https://doi.org/10.1787/7c6f6c3e-en.

([111]) Lundborg, P., Rooth, D. O., & Alex-Petersen, J. (2022). Long-term effects of childhood nutrition: evidence from a school lunch reform. The Review of Economic Studies, 89(2), 876-908. https://doi.org/10.1093/restud/rdab028.

([112]) Guio, A. C. (2023). Free school meals for all poor children in Europe: An important and affordable target? Children & Society, 37, 1627–1645. https://doi.org/10.1111/chso.12700.

([113]) Some countries have social pedagogues in schools. This is an important role since they work directly with children on their overall well-being, inclusion, relationships, and personal development. In countries in which the figure of the social pedagogue is not formalised, through articulation with community actors and/or training of internal staff, similar support can be offered to learners.

([114]) https://www.mdpi.com/2227-7102/15/8/1032.

([115]) Chen, B., Chen, J., Wang, M., Tsai, C.-C., & Kirschner, P. A. (2025). The Effects of Integrated STEM Education on K12 Students' Achievements: A Meta-Analysis. Review of Educational Research, 0(0). https://doi.org/10.3102/00346543251318297.

Attendance monitoring with responsive, tiered support	All skills (via learning time)	Primary, Secondary, VET	Timely pupil-level data; early contact with families; identifying causes of absence; tiered responses from school-wide to individual; links to health/social services	Evidence base weak overall; most promise for parental communication and responsive interventions targeting individual causes [116]	Low–Medium (staff time; data systems)

Examples from Member States and beyond

- **Germany:** MindMatters is a curriculum-plus-whole-school programme to promote mental well-being of students, staff and parents in primary and secondary schools. The programme is not managed or funded by a single ministry, but operates as a joint, multi-stakeholder alliance involving health, labour and education sectors, with modular materials, staff training, and school development tools. ([117]) Evidence of effectiveness: Originating from an Australian evidence base and adapted for Germany, MindMatters has positive evaluation findings on school climate and mental-health literacy; ongoing German studies continue to assess outcomes and implementation at scale.

- **England -** Mental Health Support Teams (MHSTs): NHS-led teams have been embedded in schools/colleges since 2018/19; the government has committed to expanding them to full coverage by 2029/30 (with interim expansion milestones). Schools report high satisfaction but note workforce capacity challenges. National rollout data and early evaluations show **high school uptake**, perceived improvements in access to early help, and **emerging quantitative evidence of reduced absence** in interrupted time-series analyses. ([118]) ([119])

- **Slovenia (Roma school assistants):** Since September 2021, the Ministry of Education has institutionalised Roma assistant posts in kindergartens and primary schools. These are school-based roles, typically filled by members of the Roma community, tasked with bridging communication between families and schools, supporting pupils' language and learning, and improving attendance and parental engagement. The posts moved from project-based to regularly employed positions following regulatory changes. Schools with higher numbers of Roma pupils can employ assistants as part of their staff, with ministry guidance and co-ordination anchored in national Roma strategies (2021–2030) ([120]).

- **Poland (cross-cultural assistants):** since 2010, Poland has provided a legal basis for employing assistants to support the education and integration of pupils with a migrant background. Cross-cultural assistants (employed by NGOs) help pupils whose Polish is not yet sufficient, through translation, emotional and organisational support, teaching assistance and conflict resolution ([121]).

- **Ireland – Traveller Education Strategy:** Pilot schools collaborated with the National Educational Psychological Service to address low literacy among Traveller children. Participation required schools to reallocate resources and commit leadership support.

([116]) Education Endowment Foundation (2022), Attendance Interventions: Rapid Evidence Assessment, Education Endowment Foundation, London.
([117]) MindMatters. (n.d.). Programm – MindMatters (national programme description; modules, school development approach).
([118]) https://www.england.nhs.uk/mental-health/cyp/trailblazers/.
([119]) Ellins, J. et al. (2024). "The effectiveness of Mental Health Support Teams at reducing school absence: an interrupted time-series study." Journal of Epidemiology & Community Health.
([120]) Similar examples included ROMED and INSCHOOL, joint initiatives from the Council of Europe and the European Union, aiming to render schools more inclusive for Roma children and to train mediators in delivering quality mediation between Roma communities and local authorities.
([121]) Siarova, H. (2022). *Education interventions supporting newly arrived migrant and displaced children in their language learning needs* (NESET ad hoc report no. 2/2022). European Commission. https://education-socioeconomic-experts.ec.europa.eu/publications/ad-hoc-reports-and-other-publications/education-interventions-supporting-newly-arrived-migrant-and-displaced-children-their-language_en.

Despite initial resistance from some teachers, targeted training led to improved literacy outcomes and higher attendance rates.

Risks and how to manage them

- **Unclear ownership:** without named leads and clear referral timelines, children fall through gaps between services.
- **Screening without follow-up**: over-screening without sufficient service capacity adds workload and stigma without benefit.
- **Staff shortages:** psychology and mental health capacity is insufficient in many systems; investment in capacity should accompany expansion of referral pathways.
- **Data sharing:** proportionate, GDPR-compliant data flows are essential; heavy-handed data sharing risks privacy and trust.
- **Treating absence only as non-compliance**: sanctions-only responses can deepen disengagement and stigmatise families facing structural barriers. Identify the causes before responding.

7. Family engagement programmes to foster basic skills



What it is

Structured, school-led activities that bring schools and families together to support children's basic skills development. Particularly powerful for learners at risk, including those from disadvantaged, migrant, or low-literacy backgrounds. For migrant and newly arrived families, cultural mediators from their communities and language classes for parents are vital to overcome linguistic and cultural barriers. Schools remain the main agents since effective engagement does not require parents to act as substitute teachers. The objective is to recognise that basic skills promotion depends on relationships that extend beyond the classroom, and that the school–family relationship in particular needs deliberate, structured investment. That investment works best when the relationship is a genuine two-way partnership: activities shaped jointly with parents, rather than merely delivered to them. This deepens trust and reaches the families that are otherwise hardest to involve, and it is particularly relevant in the context of multiple and complex digital challenges, where supporting and empowering parents, rather than simply informing them, is essential ([122]). (EU Special Panel on Child Safety Online, 2026).



How to put it in practice

Promoting basic skills through family engagement requires schools to take the lead in building trust and giving families concrete, manageable ways to support their children's learning.

([122]) As per the conclusions of: Fegert, J. M., & Melchior, M. (2026). Child safety online: Protecting and empowering minors in a digital world — Report by the Co-Chairs of the Special Panel on Child Safety Online. European Commission.

System / Ministry level	School level
Fund dedicated family and community liaison roles (as in Ireland's Home School Community Liaison model) so engagement is embedded in school structure, not left to temporary projects.	Give a staff member protected time for family liaison and outreach (this is a key enabling condition).
Connect family engagement with adult learning: strengthening parents' own basic skills, including digital literacy and citizenship competence, has a direct positive effect on children's outcomes. Strengthening parents' own digital literacy is also what equips them to keep their children safe online.	Go to families: home visits, outreach in community centres, and partnerships with local organisations to reach families of pupils who do not come to school. Where possible, work with mediators or home visitors who speak the family's language, as in home-visiting programmes such as HIPPY, which recruit visitors from the community and work in the parents' first language ([123]).
	Run practical, brief workshops (i.e., reading aloud techniques, number games, homework support) giving families concrete examples of what they can do with their children to strengthen basic skills. Value families' home languages as a resource for learning and encourage parents to keep reading and talking with their children in the home language.
	Develop digital and citizenship dimensions with families: practical workshops that give parents concrete skills rather than general warnings. Drawing on the EU Special Panel on Child Safety Online (2026), these can cover: • setting up privacy and safety settings and protecting personal data across social media, messaging and gaming; • spotting manipulative or addictive design, disinformation, deepfakes and scams; • managing screen-time balance, attention and healthy routines (sleep, offline activity), starting with keeping devices out of the bedroom at night; • supporting children's device use with age-appropriate supervision and gradually widening autonomy; • and knowing where to turn for help (for example, national Safer Internet Centres and helplines) and making clear to children that reporting an online problem will bring help rather than the loss of their device.
	Communicate with families about attendance in a personalised, clear and non-judgemental way (e.g. showing days missed rather than percentages) and combine messages with relationship-building rather than warnings alone.

([123]) Siarova, H. (2022). *Education interventions supporting newly arrived migrant and displaced children in their language learning needs* (NESET ad hoc report no. 2/2022). European Commission. https://education-socioeconomic-experts.ec.europa.eu/publications/ad-hoc-reports-and-other-publications/education-interventions-supporting-newly-arrived-migrant-and-displaced-children-their-language_en.



Evidence at a glance

Parental involvement has a **positive, moderate** association with achievement; models centred on **supervising learning at home** are most strongly linked to outcomes. ([124]) ([125]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Guided reading interventions ([126])	Literacy	ECEC, Primary	Parent training (brief formal guidance on specific instructional methods), Paired reading.	Word comprehension : e-book +24.5 pts; printed +22.9; control	Low-cost delivery (brief parent coaching; existing books/devices).
Home mathematics coaching/checklist for parents (counting games, money talk, puzzles, rhymes) ([127])	Mathematics	ECEC, primary	Promote short, frequent parent–child numeracy activities (counting games, shopping "money talk", number rhymes, simple puzzles; use of child maths software)	Children with higher home numeracy activity scored significantly higher.	Low-cost to implement via handouts/SMS prompts and brief parent workshops.
Parent-mediated language course for families ([128])	Literacy	ECEC	8-week courses	Large jump in joint attention (score went from 10 to 22).	Low cost (8-hour course)
Home learning environment enrichment	Literacy, Mathematics	Early years, Primary	Schools give families ideas, activities, and resources to support learning at home (e.g. shared reading with discussion prompts, embedding learning in daily routines), and model strategies so	Associated with around four months' additional progress on average; effects similar for literacy and numeracy, though the maths evidence base is smaller and less certain. Approaches	Low (mainly staff training and materials; assumes existing parent-communication technology).

([124]) Castro, María; Expósito-Casas, Eva; López-Martín, Enrique; Lizasoain, Luis; Navarro-Asencio, Elena; Gaviria, José L. Parental involvement on student academic achievement: A meta-analysis. 2015. https://www.sciencedirect.com/science/article/pii/S1747938X15000032.

([125]) Fiskerstrand, A. (2022). Literature review – Parent involvement and mathematic outcome. Educational Research Review. https://doi.org/10.1016/j.edurev.2022.100458.

([126]) Korat, O., Shamir, A., & Heibal, S. (2013). Expanding the boundaries of shared book reading: E-books and printed books in parent–child reading as support for children's language. First Language, 33(5), 504-523. https://doi.org/10.1177/0142723713503148 (Original work published 2013).

([127]) Kleemans, Segers, & Verhoeven (2013), Early Childhood Research Quarterly, 28, 415–423.

([128]) Botting et al. (2024). Intl. J. Language & Communication Disorders. DOI:10.1111/1460-6984.12943.

			parents can lead positive learning interactions. Most evidence concerns home-reading interventions.	where a parent works one-to-one with their child show the greatest impact. ([129])	

Examples from Member States and beyond

- **Ireland (DEIS & HSCL):** Ireland offers a particularly strong and systemic model for family and community engagement. Within the DEIS programme, schools are expected to implement and document a range of engagement practices, such as maintaining parent rooms, providing family literacy packs, and running "stay-and-play" sessions in infant classes. This is further supported by the state-funded Home School Community Liaison (HSCL) Scheme, which allocates dedicated coordinator roles to many DEIS schools. These coordinators, which are teachers released from their duties, work full-time to build bridges between the school and the families of its most at-risk students, representing a significant systemic investment in this enabling condition. ([130])

- **France – School-based family literacy clubs:** Book-reading clubs were organised as after-school activities where parents participated alongside children. The initiative helped strengthen both adult and child basic skills and reinforced the school's role as a community learning hub.

- **Croatia – Parent workshops:** In-school pedagogues run workshops for parents combining academic tutoring with social-emotional learning, media literacy, and digital citizenship – a strong model for integrating digital and citizenship dimensions into family engagement.

Risks and how to manage them

- **Lack of dedicated staffing and protected time:** engagement activities collapse under day-to-day pressures; embed these functions in the school structure, not in temporary project funding.
- **Equity gaps in parental support**: Do not rely on parents for providing full pedagogical support: many families lack the capacity, and this approach widens existing gaps. Schools should identity the pupils with additional needs and empower their parents, while simultaneously ensuring the necessary support at school level.
- **Linguistic and cultural accessibility:** materials and outreach efforts are often not tailored to the diversity of the school population. They should be accessible to families with low educational attainment and/or limited proficiency in the language of schooling. AI-supported translation can ease everyday contact between teachers and non-native-speaking parents.

([129]) Education Endowment Foundation (2025). Parental engagement. Teaching and Learning Toolkit. EEF. https://educationendowmentfoundation.org.uk/education-evidence/teaching-learning-toolkit/parental-engagement (last updated May 2025; based on 124 studies, evidence security rated high).

([130]) Department of Education (Ireland), Inspectorate. Improving Outcomes and Experiences for Children and Young People – Evaluation of Home School Community Liaison (HSCL) in Primary and Post-Primary Schools. 2024. https://www.gov.ie/en/department-of-education/publications/inspectorate-publications-evaluation-reports-and-guidelines/ (press summary) and full report: https://school-education.ec.europa.eu/system/files/2025-02/download.pdf.

8. Schools–community cooperation for basic skills



What it is

Structured partnerships between schools and the wider community, including local authorities, civil-society organisations, NGOs, cultural institutions, sports clubs and associations, youth organisations, civil protection, public research bodies, public libraries, organisations from the private sector and the wider world of work, extend basic skills development beyond the school day and classroom. These partnerships give learners access to expertise, settings, and real-world relevance that schools cannot easily provide alone: mentors, hands-on facilities, exposure to different professions and working environments, or collaborative projects across age groups.

The emphasis is on creating authentic conditions in which learners apply literacy, digital, scientific, and citizenship competences to concrete tasks, frequently working alongside community practitioners, volunteers, or older peers. Civil-society organisations play a particularly important role here: trained volunteers and community-based literacy programmes provide some of the most consistently evidenced models of community partnership in basic skills, especially for learners most at risk of falling behind. Employers and professional associations contribute authentic real-world contexts for applying digital, science, preparedness and citizenship competences. Cultural institutions, libraries, sports clubs, and youth organisations extend the learning environment in ways that build engagement and motivation alongside skills. The objective is to deliberately use these relationships to advance basic skills promotion through structured, curriculum-linked activities, building on a well-established European practice of schools partnering with organisations in their wider community.

This cooperation is also key to nurture basic skills top performance, since structured links with universities, science centres, and employers, as well as participation in projects or competitions, can reach high-potential learners who may otherwise miss such opportunities.



How to put it in practice

External partnerships are most effective when they are aligned with clear learning objectives, provide authentic opportunities to apply basic skills, and are accessible to all learners.

System / Ministry level	School level
Coordinate partnerships locally, regionally or nationally so all schools can take part, not just those with existing networks.	Choose partnerships with a specific basic-skills learning objective: digital competence, science, citizenship, or literacy in real-world contexts
Use system-level public funding and coordination to give every school access to facilities, expertise, or tools it could not arrange alone.	Structure activities as genuine projects where learners produce a concrete output, solve a real problem, or practise a skill in an authentic context.
Where digital tools are involved, set clear data governance agreements and guard against dependency on any single provider through interoperability requirements and open standards.	Coordinate access so learners do not need to rely on their own personal networks to take part.
	Keep a brief record of what learners did during such out of school activities, what they learned, and what worked.



Evidence at a glance

Partnership between schools and external organisations is well evidenced as a driver of engagement and an education anchored in real-world relevance. Direct evidence on community partnerships specifically as a basic-skills accelerator is still developing; evidence from related approaches (service-learning, civic participation structures, and STEM co-creation spaces) supports positive effects on motivation, digital competence, and civic engagement when activities are structured, curriculum-linked, and supported by teachers and external facilitators. Service-learning projects and co-creation spaces with community partners show small-to-moderate gains in civic engagement, attitudes towards school, and motivation to learn ([131]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Workplace exposure and mentoring	Digital, Citizenship, Science	Secondary, VET	Structured learning goals; mentor training; curriculum alignment; gender equity design	Positive effects on motivation and career readiness; direct basic skills evidence limited	Low–Medium (coordination; transport)
Cross-age design projects (primary–university–VET)	Digital, Science, Citizenship	Primary, Secondary, VET	Clear roles for each age group; structured stages; adult facilitation	Promising but limited evidence for this direct format; knowledge transfer across age groups ([132])	Low (mainly coordination)
EdTech and industry partnerships for digital skills	Digital	Secondary, VET	Teacher control; clear pedagogical purpose; data governance agreement	Variable; strongest when teachers lead the learning and industry provides tools and expertise ([133])	Variable (depends on partner)
Service-learning projects with community partners	Citizenship, digital	Lower and upper secondary	Students identify a real community need with partners. They	Quasi-experimental evidence ([134]) from 5 EU countries shows	No cost or cost-effectiveness data reported; implementation feasible but

([131]) Celio, C.I., Durlak, J., & Pascarella, E. (2011). A meta-analysis of the impact of service-learning on students. Journal of Experiential Education, 34(2), 164–181. https://doi.org/10.1177/105382591103400205.

([132]) Nickow, A., Oreopoulos, P., & Quan, V. (2024), "The Promise of Tutoring for PreK–12 Learning: A Systematic Review and Meta-Analysis of the Experimental Evidence," American Educational Research Journal. https://doi.org/10.3102/00028312231208687 — a pooled effect size of 0.288 SD across dozens of randomised experiments, with effects largest for programmes using teachers or paraprofessionals, in earlier grades, and run at least three days per week during school.

([133]) Wang et al. (2025), "The Effectiveness of Technology-Supported Learning in Improving Students' Digital Literacy — A Meta-Analysis of 56 Experimental and Quasi-Experimental Studies," Journal of Computer Assisted Learning. https://doi.org/10.1111/jcal.70137.

([134]) Brozmanová Gregorová, A., Heinzová, Z., Subasi Singh, S., Laven, R., Vamos-Karandish, M., Arco-Tirado, J., Fernández-Martín, F., Gleeson, T., & Ryan, P. (2024). The impact of service-learning on secondary school students' social and civic competencies, and engagement and motivation in school – perspectives from Europe. International Journal of Research on Service-Learning and Community Engagement, 12(1). https://doi.org/10.37333/001c.127553.

			define clear roles and plan the work, practising collaboration, problem-solving, and other participation skills. Mentors provide steady guidance throughout.	moderate post-test gains in well-being, civic responsibility/efficacy, social-responsibility values, and school belonging, with reduced intention to drop out.	resource/time constraints noted.
Non-formal and community learning	Citizenship, Digital	Primary, Secondary	School–community partnerships; aligned learning objectives	Moderate civic and engagement gains from service-learning and non-formal activities	Low
Engagement in community-based sport and physical activity	All basic skills	Primary, Secondary, VET	Partnerships with sports clubs	Improving physical ([135]) and mental ([136]) health were shown to lead to better learning, while promoting social and emotional competences through sports ([137]), such as cooperation, sociability, team work, can provide a strong basis for basic skills development.	Medium (coordination; transport; sports club membership fees)

Examples from Member States and beyond

- **TADA – ToekomstAtelierDelAvenir (Belgium):** A structured programme connecting schools with companies and organisations to give young people direct experience of different professions and working environments, explicitly linking workplace exposure to school learning goals and building motivation for further education and training.

- **Girls' and Boys' Day (Germany):** An annual initiative (April/May) for students from approximately age 10, in which girls try professions typically associated with boys (engineering, mechanics, policing) and boys try those typically associated with girls (childcare, healthcare). Approximately 180,000 placements annually across Germany, with

([135]) Sun, Z., Yuan, Y., Xiong, X., Meng, S., Shi, Y., & Chen, A. (2024). Predicting academic achievement from the collaborative influences of executive function, physical fitness, and demographic factors among primary school students in China: ensemble learning methods. BMC Public Health, 24(1), 274. https://doi.org/10.1186/s12889-024-17769-7.

([136]) Agnafors, S., Barmark, M., & Sydsjö, G. (2021). Mental health and academic performance: a study on selection and causation effects from childhood to early adulthood. Social psychiatry and psychiatric epidemiology, 56(5), 857-866. https://doi.org/10.1007/s00127-020-01934-5.

([137]) Nada, C., Rios, C., Miguel, I., Cailliau, B., Arbués, D., & Silva Dias, T. (2026). 'When I enter the ocean, I forget about all my problems': improving young people's well-being and education through surf therapy. Leisure Studies, 1-17. https://doi.org/10.1080/02614367.2025.2486091.

companies hosting students in real working environments. A powerful model for combining workplace exposure with gender equity and digital and citizenship skills development.

- **My Machine (Belgium, Czech Republic, Slovakia, and others):** A structured cross-age project in three steps: (1) Primary school students invent their dream machine; (2) university students design a concept; (3) vocational or technical secondary students build a working prototype. Develops digital and science competences, creates genuine cross-level collaboration, and builds civic and creative agency.

- **CYANce Center for Climate Creativity (Austria):** A publicly funded STEM centre in Tyrol that is structured as a "co-creation space" where children and young people investigate water, bioresources and alpine climate challenges alongside experts from science and industry. Using biolabs, digital fabrication and learning games, it develops science and digital competences through authentic, real-world inquiry.

- **Lire et Faire Lire (France):** A national civil-society programme created in 1999 by writer Alexandre Jardin, in which some 13,000 volunteers aged over 50 lead reading sessions in schools and other educational settings for children aged three to ten, using an intergenerational approach — bringing retired community members into primary schools to share the experience of reading aloud with small groups. The programme reaches approximately 15,000 children annually and is coordinated locally through schools and public libraries. It is a strong example of a civil-society literacy model that is publicly recognised, operates at national scale, and requires no commercial incentive to function.

- **EU simulation games to enhance citizenship skills (Germany)**: These are short EU simulation games run in partnership with external civic education organisations (such as planpolitik) to develop citizenship competence directly inside schools. A pre-post study ([138]) (N=308 secondary students, Lower Saxony and North Rhine-Westphalia) found medium effects on EU knowledge (d=0.42) and perceived EU responsiveness (d=0.42), and high student satisfaction. This example illustrates how civil-society organisations can partner with schools and education systems to produce measurable improvements in basic skills.

- **Little Odysseus – Four spoons for a yellow submarine (Cyprus) ([139]):** the programme offered a unique journey through reading, sensory exploration and storytelling for children with special needs. Each session combined books, music and creative activities designed to enhance emotional expression, imagination and social interaction. Little Odysseus was organised in 2024 by the Limassol Municipal University Library in collaboration with the Andrey & Julia Dashin's Foundation and the Limassol Municipality.

Risks and how to manage them

- **Equity:** partnerships dependent on individual schools' networks benefit already-advantaged schools most; national or regional coordination ensures all schools can participate.
- **Commercial interests**: clear partnership agreements should define the scope and use of any school data; partnerships are for learning, not marketing.
- **Quality and relevance:** activities not tied to learning goals add activity without value; every partnership needs a clear purpose and a way of verifying whether the learning goal was met.
- **Teacher workload:** coordinating external partnerships takes time; cluster-based or municipality-wide coordination reduces the burden on individual schools and their staff.

([138]) Oberle, M., & Leunig, J. (2016). Simulation games on the European Union in civics: Effects on secondary school pupils' political competence. Citizenship, Social and Economics Education, 15(3), 227-243. https://doi.org/10.1177/2047173416689794.

([139]) European Commission: Directorate-General for Education, Youth, Sport and Culture, Strengthening Europe through public libraries. annex 3, Best-practice examples – Libraries tackling Europe's key societal challenges, Publications Office of the European Union, 2026, https://data.europa.eu/doi/10.2766/7725213.

9. The role of school leaders in promoting basic skills



What it is

Support and peer learning for **school leaders and middle leaders** to continuously monitor basic skills improvement. This requires inclusion of basic skills as a core objective of key school documents (e.g., educational project, school development plans). Corresponding indicators to measure achievement of this objective are also key. Just as important is data literacy: the main constraint is rarely a lack of data but the capacity to use it well, so leaders and staff need the skills to turn attainment, attendance, and assessment information into an enhanced understanding of learners' diverse needs and be able to take decisions and design adjusted basic skills improvement actions ([140]). Furthermore, alongside underachievement, data collection should track top-performance trends, so that potential high achievers in need of additional support to reach their full potential are also identified.



How to put it in practice

Schools are more successful in improving basic skills when leaders establish a shared vision, use data strategically, and support collaborative professional learning focused on learner outcomes.

System / Ministry level	School level
Fund external coaching and training for school leaders and middle leaders, as well as dedicated peer-learning networks on basic skills promotion.	Make basic skills a shared, visible priority: include it as an objective in key documents guiding the school's action, explain why it matters
Ensure training and networking opportunities are accessible to high-need schools, supplementing school budgets, when necessary, to avoid constraints.	Connect basic skills to the school's everyday work so staff see it as core objective rather than an add-on. Build teacher ownership as teachers who see underachievement as something they can act on are the strongest drivers of improvement.
Enable peer review and peer mentoring for school leadership across schools and subject networks	Make use of the available data and collect additional data, if needed: review attainment, attendance and assessment information across all five basic skills to locate the main gaps that require intervention (drawing on Measure 1 on diagnostic screening). Examine this data collaboratively within professional learning communities (e.g., regular team reviews of learner work and progress) so analysis feeds directly into teaching practices and not just reporting.
Protect time allocated for collaboration and leadership tasks (concerning timetables and workload rules) so school improvement work is not seen as a secondary task.	Set measurable, time-bound targets for basic skills and capture them in improvement plans that link each target to specific classroom changes and related CPD activities.
Provide ready-to-use tools (e.g., diagnostic instruments, planning templates, key performance indicators frameworks) so leaders are not building from scratch	Distribute leadership: give middle leaders and subject leads clear responsibility for specific basic skills, and the authority to act on it
Keep accountability demands proportionate, so improvement planning is a genuine tool for learning rather than a compliance exercise	
Build data literacy: fund short, practical training so leaders and teachers can interpret school-level data together and act on it.	

([140]) EASNIE (European Agency for Special Needs and Inclusive Education), 2025. Quality assurance, monitoring and accountability: Collection and use of data in inclusive education.

Initiate peer partnerships: pair with one or two neighbouring schools for honest mutual review, even where no formal network exists



Evidence at a glance

A recent multi-country individual participant data meta-analysis (1.5M students, 75 countries) finds a small but positive association between instructional leadership and student achievement, varying by context and mediated by teacher collaboration. ([141]) Earlier work from the OECD's 2013 Teaching and Learning International Survey (**TALIS)** work linked "leadership for learning" with **stronger professional learning communities** and a **more positive learning climate**. ([142]) **New TALIS 2024** results show teachers now spend **more time working together than in 2018** (≈3 hrs/week on teamwork/dialogue), and teachers reporting **good relationships with principals and colleagues** also report higher well-being and job satisfaction, consistent with collaboration as a key pathway from leadership to school-level improvement ([143]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Leader-led improvement cycles (drawing on coaching/peer support)	All basic skills	Primary, Secondary, VET	Coaching cycles on curriculum, data use, observation/feedback	Small positive effects on achievement when coaching builds professional learning communities and instructional routines. (Pietsch et al)	Medium (coaching time; high ROI if targeted)
Data-informed school improvement planning	All basic skills	Primary, Secondary	Annual targets; assessment calendars; professional development aligned to gaps	Associated with improved instruction and progress monitoring; outcomes depend on fidelity of implementation (OECD, 2016)	Low–Medium
Professional learning communities & protected collaborative time	All basic skills	Primary, Secondary, VET	Protected timetabled collaboration; a persistent focus on student learning data; shared norms	Well-developed professional learning communities consistently linked to improved teaching	Low–Medium (the binding constraint is timetabled time, and not funding as such)

([141]) Pietsch, M., Aydin, B., & Gümüş, S. (2025). Putting the instructional leadership–student achievement relation in context: A meta-analytical big data study across cultures and time. Educational Evaluation and Policy Analysis, 47(1), 29–64.

([142]) OECD (2016), School Leadership for Learning: Insights from TALIS 2013, TALIS, OECD Publishing, Paris, https://doi.org/10.1787/9789264258341-en.

([143]) OECD. (2025). Results from TALIS 2024: The State of Teaching. TALIS, OECD Publishing, Paris. https://doi.org/10.1787/90df6235-en.

			and collective responsibility	practice and modest-to-meaningful achievement gains ([144])	
Distributed leadership / middle-leader ownership of basic skills	All basic skills	Primary, Secondary, VET	Clear roles and decision rights for middle leaders/subject leads; leadership shared around expertise rather than hierarchy; supportive disciplinary climate and teacher job satisfaction as the working channels	Small but consistent positive *indirect* effect on achievement, working mainly through teacher job satisfaction, collaboration and school climate; teacher-leadership meta-analysis finds a positive association with attainment (r ≈ .19) ([145])	Low–Medium (mainly reallocates existing roles and decision rights; needs time and role clarity)

Examples from Member States and beyond

- **England –** Education Endowment Foundation/Research Schools Network. These bodies support school heads and subject leads to write tight, evidence-informed improvement plans (e.g., reading comprehension, maths feedback), run **implementation cycles**, and sustain **professional learning communities** that use short, curriculum-linked assessments to adapt teaching; tools include the *School's Guide to Implementation*, leadership resources, and regional delivery support. The Education Endowment Foundation reports widespread adoption (¾ of state schools participating in projects) and hosts a large evaluation portfolio; RSN provides **school-to-school coaching** that helps translate guidance into practice, with monitoring via project and evaluation reports ([146])

- **Portugal - Programa de Promoção do Sucesso Escolar (PNPSE): PNPSE** deploys external **coaches/advisers** to school clusters to diagnose gaps, set **focused literacy/mathematics targets**, and run **8–12-week cycles** with quick checks; school clusters share insights through regional networks, and plans are formalised in the **Plans for Strategic Action and Improvement** documents. Government resolutions established and extended the programme; national reports document **broad uptake** and local monitoring of attendance/attainment indicators, with improvement plans and progress reports published at cluster and inter-municipal level ([147]).

- **Finland –** Municipalities and Finnish National Agency for Education back **leadership training** that couples curriculum/assessment implementation with **data-use within municipal improvement cycles**; leaders set measurable goals, schedule short evidence checks, and participate in peer review across schools. National profiles and evaluation plans document Finland's **municipal leadership role**, principal preparation/CPD, and systemwide evaluation that feeds local improvement cycles. ([148])

([144]) Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and teacher education, 24(1), 80-91.
([145]) Shen, J., Wu, H., Reeves, P., Zheng, Y., Ryan, L., & Anderson, D. (2020). The association between teacher leadership and student achievement: A meta-analysis. Educational research review, 31.
([146]) EEF. "EEF evaluation reports & research papers" (portfolio of RCTs/evaluations; data archive).
([147]) Sample PNPSE monitoring reports (Plano de Ação Estratégica / Execução 2022–23).
([148]) Kauko, J., Varjo, J., & Pitkänen, H. (2020). Quality and Evaluation in Finnish Schools — emphasis on municipal and school-level self-evaluation, no inspection regime.

- **Czechia – School Improvement Plan for Literacy (SIPL):** Voluntary strategic planning (2022–2023) involving thematic inspections and workshops; reported moderate positive impact. The voluntary approach reflects the importance of building school-level ownership.

Risks and how to manage them

- **Time and capacity:** without protected collaboration time and qualified coaching, improvement plans become compliance exercises; treat funding and timetabling as integral to the measure.
- **Equity**: if provision depends on school resources, better-resourced schools access coaching while high-need schools cannot; central funding streams that account for the intensity of needs are essential.
- **Curriculum narrowing:** plans focused only on tested literacy and mathematics crowd out science, digital, and citizenship work; explicitly include all five basic skill areas.
- **Data overload:** coordinating external partnerships takes time; cluster-based or municipality- a few meaningful KPIs tracked consistently outperform a comprehensive monitoring system that generates dense data that no one has the time and capacity to process.

10. Supporting continuity in basic skills across educational transitions



What it is

Transitions between education stages (such as ECEC to primary, primary to lower secondary, lower to upper secondary, or VET) are times when the development of basic skills can slow down, attendance may decrease, and the most vulnerable students might become disengaged. Transition points are widely recognised as moments of heightened risk of early leaving, which makes this not only a key basic skills improvement measure, but also an early-leaving prevention one. Absence problems often emerge or harden at the transition to lower secondary, and keeping familiar classmates together after a transition has been linked to lower absence[149].

Top performers can also lose momentum at transitions when the next stage fails to sustain challenge. Carrying forward information on learners' needs is therefore essential, but also on their strengths and high potential, in order to nurture and support top performance. Despite these challenges, transitions can also be opportunities for students, providing a fresh start, new teachers, and better connections with the families.

The following measures focus on practical, school-led actions that can be put in place to keep learners' basic skills competences moving forward through these changes. This includes shared progression frameworks, transfer of assessment records, bridging activities, and mentoring for motivation and well-being.



How to put it in practice

Successful transitions require structured support before, during and after the move to a new educational stage, helping learners adapt quickly and continue progressing in their learning.

([149]) OECD (2026), Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems, OECD Publishing, Paris, https://doi.org/10.1787/7c6f6c3e-en.

System / Ministry level	School level
Give schools ready-made materials for running the buddy and mentoring schemes(e.g., a simple pupil-pairing protocol and short training notes for the staff and older-pupil mentors involved), so schools do not have to design them from scratch.	Pair each incoming pupil with an older buddy for the first term. A few hours of learner training, simple pairing protocol, monthly informal check-ins. No new staff needed
Recommend that schools include cross-cycle continuity as a target in their improvement plans (see measure 9).	Run a short transition block before and after the move (for example, three to five short sessions covering "what changes next year," a school visit, a Q&A with pupils who made the same transition last year, and a written reflection on hopes and concerns). Class teachers or year-group heads can deliver this; an educational psychologist is not required.
Where possible, fund summer or end-of-year bridging time for the most vulnerable cohorts; free meals and transport remove the most common barriers to participation.	For pupils flagged at risk, run a one to two-week intensive bridging block at the start of the new cycle (or end of the previous one): small groups, focused on specific basic skills, paired with diagnostic screening (Measure 1).
Develop partnerships with universities, teacher training institutions or volunteer mentor networks to extend reach in high-need schools.	Identify the five to ten most at-risk pupils per cohort and assign each a named mentor (a class teacher, year-group head, or trained older pupil) for short, regular check-ins across the year of transition.



Evidence at a glance

Poorly managed transitions are associated with drops in attainment, engagement and well-being; structured supports can mitigate these declines. ([150]) For ECEC to primary, OECD notes that the benefits of ECEC fade without intentional transition policies (shared goals, aligned pedagogy, information flow). ([151]) Systematic reviews suggest varied but promising effects for primary–secondary transition interventions when they combine academic and mentoring elements and use data to target specific needs. ([152]).

Basic skills improvement measure	Primary target skill(s)	Education level(s)	Key implementation factors	Evidence of impact (indicative)	Cost
Structured transition programme	Citizenship, supports literacy/mathematics engagement	Primary–Lower Secondary	3–5 short sessions; "what changes next year," school visit, Q&A with older pupils, written reflection on hopes and concerns; delivered by	RCT (Coelho et al., 2016, N=1,147): small positive effects on self-esteem (d=0.32) and social self-concept (d=0.36); counteracts	Low (uses existing psychologist/teacher capacity; modest session materials)

([150]) Duncan, A. et al., 2019. Primary-secondary transitions: A systematic literature review. Research Findings 12. Scottish Government / University of Dundee.
([151]) OECD, 2017. Transition from early childhood education and care to primary education. OECD Publishing.
([152]) GRETB, n.d. School Completion Programme. Available at: https://gretb.ie/schools/school-completion-programme.

			class teacher or year-group head	post-transition decline in self-perception	
Cross-age peer tutoring at transition	Literacy, Citizenship, Digital	Primary–Lower Secondary; Lower–Upper Secondary	Older pupils paired with incoming pupils; teacher, pupil and family training; clear role definition; focus on emotional and social competences	RCT (Ferrer-Cascales et al., 2019, N=2,057): significant improvements in school climate, belonging, cooperation, and family-school communication ; reductions in bullying behaviours (small to moderate effect sizes) over 7 months	Low (peer time; one-off training investment)
Summer bridging programme for vulnerable pupils	Literacy, Mathematics	Primary–Lower Secondary	1–2 weeks intensive at transition window; small groups; focus on literacy and numeracy basics; paired with diagnostic screening (Measure 2); free access for vulnerable pupils	RCT (Azzolini et al., 2025, N=1,038): ITT = +0.17 SD literacy, +0.10 SD mathematics; stronger effects for primary pupils and SEN learners; compensates for summer learning loss	Medium–High (staff, premises, meals/transport); cost-shared via existing summer programmes where available
One-to-one mentoring for at-risk pupils at transition	All basic skills	Primary, Lower & Upper Secondary	5–10 most at-risk pupils per cohort; named teacher, year-group head, or trained older pupil; short regular check-ins across the year of transition	RCTs (Falk et al., 2020; Resnjanskij et al., 2021): medium effects on self-regulated learning competences, small positive effect on mathematics achievement; RCT (Resnjanskij et al., 2021): large effects on composite outcome index for low-SES adolescents	Medium (mentor recruitment and training; volunteer time keeps direct costs low)

Examples from Member States and beyond

- **Ireland** supports smoother primary → post-primary transitions trough the National Council for Curriculum and Assessment (NCCA) Education Passport, which standardises the transfer

of pupil information (learning profile, strengths/needs) from 6th class to post-primary, with guidance for parents and schools. The Education Passport process is embedded in national guidance and annually re-signalled to schools.

- **Scotland Under Curriculum for Excellence (CfE)** the Early Level spans late early learning and childcare (ELC) and early Primary 1, so pedagogy can remain play-based and experiential while gradually introducing more explicit instruction. National resources (e.g., Realising the Ambition guidance, Early Level Benchmarks) and local authority toolkits support joint planning, moderation and CPD across nursery–P1 teams; family-oriented transition activities are encouraged. Local mixed-methods evaluations (e.g., East Dunbartonshire's Play in P1 pilot/audit) report improved practitioner understanding, stronger ELC–P1 alignment and positive classroom engagement ([153]). System-level monitoring from the Scottish Study of Early Learning and Childcare (SSELC, Phase 5, 2025) shows patterns in cognitive and social-emotional outcomes at the end of funded ELC, informing readiness for the Early Level, but does not attribute changes specifically to Early Level transition guidance **([154]).**

- **Estonia**'s **national ECEC curriculum** makes observation the primary assessment method, complemented by analysis of children's work and a child portfolio/file documenting progress. Practitioners conduct a development interview with parents at least once per academic year to share feedback and agree on next steps. At the transition point, preschools issue a school readiness card summarising the child's strengths and areas for development; parents submit the card to the receiving school to support continuity at entry to Grade 1 ([155]). There is no dedicated causal evaluation isolating the portfolio/interview/readiness-card package. OECD's study *Early Learning and Child Well-being in Estonia* reports associations between ECEC experiences and child outcomes but do not attribute effects to these specific assessment practices ([156]).

Risks and how to manage them

- **Data transfer challenges:** teachers who receive information too late, or in an unusable format, cannot take data-informed decisions and make necessary adjustments; invest in simple, timely digital handover tools.
- **Over-assessment**: adding assessments at transitions without clear follow-up and communication between education levels creates workload without value.
- **Fragmented governance:** if ECEC, primary, and secondary sit in different administrative structures; appoint named leads with cross-level responsibility.
- **Equity:** multilingual learners and disadvantaged students are most at risk of falling through transition gaps; proactive outreach and targeted support are needed.

([153]) East Dunbartonshire Council / Education Scotland. (n.d.). Play in P1: Audit document / exemplar practice (SAC86 – Item 2). Available at: https://education.gov.scot/media/tbenmi0e/sac86-item2-play-in-p1-audit-document.pdf.

([154]) Scottish Government. (2025). Scottish Study of Early Learning and Childcare (SSELC) Phase 5 Report. Available at: https://www.gov.scot/publications/scottish-study-early-learning-childcare-phase-5-report/.

([155]) European Commission / EACEA / Eurydice (2025), Eurypedia, Estonia: Early childhood education and care, Educational guidelines. Available at: https://eurydice.eacea.ec.europa.eu/eurypedia/estonia/educational-guidelines (last updated 22 September 2025).

([156]) OECD (2020), Early Learning and Child Well-being in Estonia, OECD Publishing, Paris, https://doi.org/10.1787/15009dbe-en.

Concluding remarks for Part 1

While short-term gains in basic skills are promising, they do not automatically guarantee lasting effects: according to an ENESET report by De Witte and Vicente (2026) ([157]), effects on basic skills improvement frequently fade once a measure ends, particularly when later teaching does not build on them. The same report suggests that positive effects are more likely to persist when an intervention genuinely changes children's ongoing learning conditions when:

- it offers a strong contrast with what children would otherwise experience
- is sufficiently intensive
- aligns with everyday classroom practice and the curriculum
- maintains continuity across key transitions (such as preschool to primary school) targets the learners with the greatest need

In short, basic skills improvement measures are worth investing in, not only to raise test scores quickly, but ensuring they are designed to keep working over time. These measures are not an alternative to the systemic reforms which must ensure the necessary conditions of a quality school education for all. They are the concrete steps that make those reforms visible in classrooms now, while the longer-term foundations are being built (see Part 2).

([157]) De Witte, K. and Vicente Carrión, I. (forthcoming). 'Persistence and Fade-Out of Early Interventions to Improve Basic Skills', ENESET report, Luxembourg: Publications Office of the European Union. doi:10.2766/2007216.

Part 2: Enabling factors at system level supporting strong basic skills for all

The effectiveness and sustainability of basic skills improvement measures (Part 1) rest on broader, long-term efforts and reforms to promote school success for all learners. The 2022 Council Recommendation on Pathways to School Success ([158]) called on Member States to develop or further strengthen a **comprehensive and integrated approach to school success for all learners**. This Recommendation marked a significant step forward in European education policy, signalling a clear political commitment to addressing underachievement, early school leaving and educational disadvantage, promoting educational excellence and supporting learners' well-being through a more preventive, inclusive and systemic approach.

Part 2 of this staff working document is designed to help national, regional and local policymakers, as well as other education stakeholders, **translate the Pathways policy framework into concrete reforms for strengthening basic skills,** contributing to meaningful, high-quality education and support to all learners, enabling them to engage actively in their learning, feel respected, secure and listened to, and flourish both academically and personally. Part 2 outlines the long-term key enabling factors which need to be in place across the school education system to strengthen basic skills without losing sight of equity, inclusion and well-being. Based on state-of-the-art research and lessons learnt from the European Education Area (EEA) Working Group (WG) on Schools (2021-2025) ([159]), Part 2 outlines conditions for long-term, system-wide reforms, on which more immediate, targeted interventions ("basic skills improvement measures") should be able to rely.

Balancing universal measures with targeted support

Based on the Pathways to School Success policy framework, ensuring stronger basic skills for all requires combining **universal measures with more targeted and/or individualised provisions**, recognising that while all learners benefit from inclusive, high-quality education, some require additional support to overcome specific barriers to participation, engagement and achievement. This is true both for underachievement in basic skills and top performance.

What are universal measures?

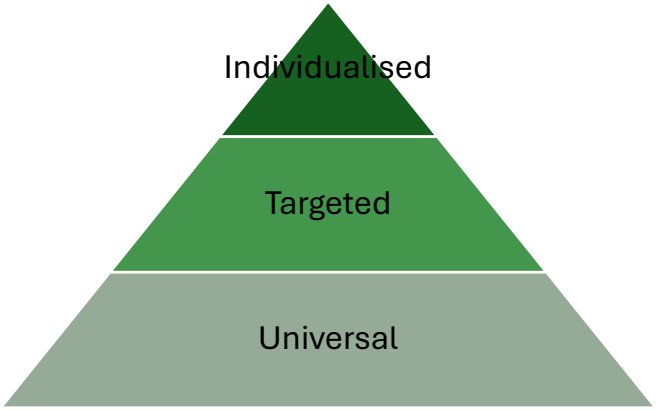
Universal measures constitute the foundational element of a multi-tier, systemic approach to well-being and school success. They include the policies, practices and learning conditions provided to all learners in every classroom to create a positive, safe and inclusive environment in which everyone can engage and thrive. Universal measures are about the very fabric and culture of the education system, acting as a preventative and proactive measure to promote success and well-being for the entire school community ([160]). They embed several core components ([161]), including high-quality teaching and learning that integrates social and emotional education into the core curriculum and the creation of a positive open school climate, with supportive relationships, a strong sense of belonging, and the active participation of learners.

([158]) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=oj:JOC_2022_469_R_0001.

([159]) Operating under the framework of the European Education Area, the Working Group on Schools, sub-group on Pathways to School Success, was established to support the implementation and follow-up to the 2022 Council Recommendation. Bringing together representatives from ministries of education (EU and partner countries), social partners, NGOs and international bodies, Commission officials and invited experts, the Working Group has promoted mutual learning and exchange of good practices, knowledge creation and sharing, developing practical guidance for policymakers and practitioners. For an overview of the WG activities and outputs see the final report (Pathways to school success - Publications Office of the EU) and the WG website.

([160]) An inclusive education system is, at its core, a preventative system. Under the Prevention-Intervention-Compensation (PIC) policy model, universal measures serve as the crucial "Prevention" foundation, designed to anticipate and remove barriers to learning and well-being before they result in educational exclusion. By intervening early with high-quality universal practices, systems can ensure that reactive or compensatory measures remain a last resort.

([161]) As highlighted in the Guidelines for well-being and mental health at school.



Strengthening universal measures is the most effective preventative long-term strategy. A robust universal system designed to strengthen basic skills for all reduces the number of learners who later require more intensive (and often more costly) remedial interventions (Gillon et al, 2024). It is from this universal foundation that more targeted and individualised support can be effectively and meaningfully implemented according to needs.

What is targeted support?

Targeted support refers to tailored educational strategies and interventions designed to address specific needs of certain groups of learners. These groups may be identified in relation to factors such as socio-economic status, learning difficulties, language background, exceptional abilities or other characteristics that education systems have not always been designed to accommodate. Where provision does not account for this diversity, these factors can become barriers to learners' acquisition of basic skills and later on academic success.. This diversity of needs manifests in multiple forms: in part as differences in how learners think, learn and perform, and in part as differences in social, cultural, economic and linguistic backgrounds.

Recognising these distinctions is essential to understanding the diversity of learners' needs and the barriers that arise when educational provision is rigid and unable to accommodate them.

According to Eurydice's latest mapping on the availability of targeted support measures across EU countries (EACEA, 2023), most policies and measures aim to ensure targeted learning support for learners with special educational needs (SEN) or disabilities, followed by support for refugee, migrant and ethnic minority learners and then those from disadvantaged socioeconomic backgrounds. Targeted policies and measures promoting learning or social-emotional support for girls/boys, LGBTIQ+ or religious minority learners are reported by a small minority of education systems.

Furthermore, **a number of individual needs and vulnerabilities** (such as poor mental health or unhealthy engagement with technology) often **remain 'invisible' in schools and in policies**, which further hinders the provision of necessary support, as well as any efforts on sensitising school communities towards these needs.

Key principles underpinning successful universal and targeted support provision

Based on the discussions within the WG Schools and available research evidence, a number of key principles underpin the design of effective universal and targeted support measures. They also guide the implementation of the six enabling factors introduced below.



Equity: The concept of equity is central to the European Education Area, since it is integral to academic success and well-being of all learners. A learner's potential should not be determined by personal or social circumstances. This involves creating conditions where every student has equitable opportunities to succeed. According to the OECD's perspective, equity should be viewed not only as a precursor to inclusion but also as a multifaceted concept that goes

beyond the allocation of resources (OECD, 2023). It involves the validation of individual identities and self-worth, which are crucial for a just and inclusive society.



Inclusive and high-quality education: As research emphasises (Armstrong, 2011), the focus of inclusive education is not merely on **accessibility** but also on **quality, human rights, equal opportunities, and social justice**. By these standards, the success of education at all levels is measured not only by the removal of barriers for those traditionally marginalised but also by the reform and adaptation of the education system as a whole to be responsive to varying needs.



ECEC as a foundation: The first years of life are a period of particularly rapid brain development (UNESCO, 2024), so early childhood education and care for children from birth until primary school is foundational for basic skills. ECEC, in addition to its benefits for gender equality, work-life balance and parental employment, is a cornerstone of lifelong learning and development because it cultivates key learning dispositions – curiosity, self-regulation, and collaboration – that are essential for acquiring basic skills later in life. Children in vulnerable situations, however, attend ECEC less often than their peers; without universal access to high-quality, affordable and inclusive provision, they risk gaps that are much harder to close later. By placing key emphasis on access to ECEC for all, socio-emotional development, an attitude to learn, curiosity, and play-based learning, ECEC systems can lay foundations to help children succeed in school and beyond without leading to premature "schoolification" of early learning (OECD, 2026) [162].



Recognising intersectionality: It is vital in understanding how various dimensions of diversity intersect in an individual. Learners hold several characteristics at once, and these can combine into distinct, overlapping forms of disadvantage – the needs of a girl from a low-income migrant family differ from those of a boy with an undiagnosed learning difficulty in a rural area. Responding to these multifaceted needs is essential (Cerna et al., 2021). Despite the growing recognition of intersectionality as a critical factor in creating inclusive and enabling education environments, only a few EU countries have explicitly incorporated this concept into their national legislations. This illustrates the ongoing challenge of translating complex, multifaceted understandings of identity and discrimination into concrete legal frameworks (EASNIE, 2022).



Non-categorisation: Albeit each learner is unique, needs still have to be identified to provide targeted support. The information should describe a child's individual learning profile rather than become a stereotyped label that defines or limits them (EASNIE, 2023). While acknowledging the drawbacks of labels, such as stigmatisation and overgeneralisation, it is important to recognise that additional needs have to be identified and considered in the framework of a child's unique learning profile. This approach values the detailed information from reports and assessments, using them to tailor educational strategies effectively.



Well-being: Well-being in education spans physical, emotional, social and cognitive dimensions, and is both a prerequisite for learning and an outcome of it. It is built through psychologically safe environments, social and emotional competences, positive relationships and mental health support. It extends to educators, since a stressed, unsupported teacher cannot create the ideal environment for learning. A comprehensive approach to well-being recognises that learners' emotional and social needs are as important as their academic progress [163].

([162]) Supporting children's foundational skills for a strong start to school | OECD.

([163]) For more information consult the Guidelines for well-being and mental health at school (European Commission, 2024a).



Digital well-being and safety: Children's increasing use of digital devices and online environments, addictive algorithms, excessive screen time, and uncritical use of AI affect their cognitive development and exposes them to age-specific risks such as cyberbullying, harmful content, problematic use, distraction, etc ([164]). For younger children especially, early and extensive unsupervised screen exposure may affect language, attention, and socio-emotional development ([165]) whereas age-appropriate content used together with an engaged caregiver can have neutral or even positive effects (Guellai et al., 2022). These risks vary according to children's developmental stage and digital maturity. This calls for a developmentally sensitive approach that combines protection with the gradual empowerment of children to use digital technologies safely, critically and autonomously. In practice, this can mean favouring unplugged and adult-mediated activities in ECEC, introducing generative AI through teacher-led activities in primary education, and gradually widening learners' autonomy in secondary education alongside explicit teaching of AI literacy and metacognition (Tilbury, 2026; Sankalaite et al., 2026). At the same time, age-appropriate and purposeful digital tools, used in moderation and with adult guidance, can support learning and inclusion. The priority is therefore not only to reduce risks, but also to create safe-by-design digital environments and a developmental, age-appropriate approach that progressively nurture the prerequisite AI literacy skills while safeguarding human learning and a stronger focus on the health and safety of our children.



Learners are active agents of the education process: Learners should have space to express their views and shape decisions that affect their education – not merely be consulted by others. In everyday school life, this means establishing and resourcing participation structures such as class councils, student councils or school parliaments, and learner representation in school boards. These structures should have a clear mandate over matters that affect learners directly, such as school rules, the use of school spaces, extracurricular activities, anti-bullying and digital well-being policies. Participation is meaningful when learners have a safe space to form their views, support to express them, an audience with the power to act, and visible influence on the outcome (Lundy, 2007). Together with other stakeholders, learners should be seen as agents that help bring success for all, thus the success of whole communities and their future. This remains a challenge since learners' voices are often unheard and learners tend to be underrepresented in decision-making structures and are not given sufficient space to brainstorm and offer solutions for inclusion (EASNIE, 2023a; Eurochild, 2025). In some cases, their participation is still tokenistic, which undermines trust and discourages genuine engagement, with adverse effects on learners' sense of mattering, agency, and belonging.

Six enabling factors ensuring quality school education for all

A successful systemic approach to strengthening basic skills relies on **six interconnected enabling factors**, all anchored in equity, inclusion and well-being. The six enabling factors form a relational rather than a linear model: each sits within and reinforces the others, so progress in one area typically depends on progress across the rest.

	Enabling factor 1	Ensuring a **whole-school and whole-system approach** to education policy planning and implementation, which is also a pre-condition for other factors to be put in place effectively
	Enabling factor 2	Developing **system of effective needs identification** allowing early detection of learners at risk of disengagement, underachievement and early school leaving, in order to provide timely and appropriate support, avoiding labelling or stigmatising of such learners

([164]) 2025 PISA Insights and interpretations PISA 2025 Insights and Interpretations.pdf.
([165]) For more information consult Special panel - European Commission.

	Enabling factor 3	Designing **curriculum and pedagogical approaches** (teaching, learning and assessment practices) that are inclusive and adaptable to leaners' diverse needs and styles
	Enabling factor 4	**Building professional capacity** (including teachers, support staff and school leaders) for basic skills, inclusion and well-being
	Enabling factor 5	Ensuring adequate flexible and smart **resource allocation** - in financial, organisational and political terms - as a key driver of system change
	Enabling factor 6	Developing robust **data collection, monitoring and evaluation mechanisms** to inform policy design and steer its implementation

1. A whole-school and whole-system approach



What is it about?

This enabling factor looks at the education system as a set of interacting subsystems (Cefai et al., 2021, p. 10): no classroom, school, educational level or policy works in isolation. A whole-school ([166]) approach aligns governance, planning, teaching, learning and assessment practices within a single setting and makes every member of the educational community co-responsible for every learner. A whole-system approach extends the same logic outward, aligning policies, funding, curricula and support across national, regional and local levels and across educational levels. It is also inherently *cross-sector*: because learning is shaped by factors well beyond the school doors, the approach connects education with the health, social-protection, employment and community services that surround the learner, so that the system operates as an interconnected ecosystem rather than a set of parallel sectors. *Partnerships* are essential to ensure sustained, reciprocal relationships in which schools, families and community actors pursue shared goals and hold joint responsibility for learners, rather than merely exchanging information or referring cases to elsewhere.

Early Childhood Education and Care is a foundational part of this ecosystem, supporting children's development, early learning and well-being.

In this sense Enabling factor 1 is a pre-condition for the other five enabling factors to function, and a connecting element of the whole framework: needs identification (Enabling factor 2), curriculum and pedagogy (Enabling factor 3), professional capacity (Enabling factor 4), resource allocation (Enabling factor 5) and monitoring (Enabling factor 6) each deliver only to the extent that governance, culture and partnerships across the system are coherent. The concrete elements of each dimension are summarised in the table below ("Key elements of a whole-school and whole-system approach"), which readers can use as a practical reference point.

([166]) While the concept of a whole-school approach is used for being more known and recognisable, in this document 'school' is understood as comprising educational institutions at ISCED levels 0-3 (early childhood education and care, primary and secondary education, including school-based initial VET).

Why does it matter?

Coherence across policies, practices and resources is what makes reforms systemic and sustainable, in schools and in the wider socio-political context around them (Hopkins et al., 2014). When parts of the system pull in different directions (e.g., two departments buying competing software; support for a learner that never reaches their teachers) – effort is wasted and learners receive contradictory signals.

Engaging families and learners is equally decisive. Meaningful parental engagement is strongly correlated with better well-being and learning outcomes, and its impact can exceed that of socio-economic factors: "academic socialisation" – discussing school with children and fostering their aspirations – is the strongest single predictor of academic success (Alieva, 2021). Effective learner participation, in turn, raises self-esteem, agency and belonging and improves decision-making (Reschly and Christenson, 2022; European Commission, 2025). Both are rights: European legal frameworks increasingly recognise parents as key partners (Paseka et al., 2025), and learner engagement is enshrined in Article 12 of the UN Convention on the Rights of the Child.

How can it be done?

A whole-school, whole-system approach rests on two mechanisms. First, **collective responsibility and alignment**: educators, leaders, communities, learners and families share ownership, and governance, planning, teaching and assessment are made coherent rather than contradictory. Second, **collaboration across levels and sectors**: policymakers, education agencies, municipalities, businesses and civil society act together. Ensuring a whole-system approach requires creating partnerships with all relevant key stakeholders and professionals around the school (social workers, youth services and organisations, health and cultural services and centres, child protection services, police, social partners, business, intercultural mediators, migrant associations etc.).

As highlighted by EASNIE (2026a), cross-sector collaboration of this kind is not an optional add-on but a structural condition for inclusion: linking education with health, social-protection, employment and community services is what makes early identification of needs, co-ordinated support and holistic provision possible, particularly for the most vulnerable learners. The aim is to overcome 'siloed' service delivery, in which each sector works only to its own mandate, so that support reaches the learner as a coherent whole rather than as disconnected interventions.

Since both whole-school and whole-system approaches assume a comprehensive, **collaborative effort** to create an inclusive environment, they bring together **various stakeholders**, including teachers, school leaders, policymakers, learners, families, municipalities, community organisations and other relevant actors, who collectively work towards common goals of inclusion and well-being of learners (Rooney et al., 2015; Jamstho, 2015; Vlcek and Somerton, 2023). For that, what is needed is **ownership and leadership** - bringing various stakeholders together and establishing **shared frameworks**, such as priorities and assessment strategies (Donnelly and Kyriazopoulou, 2014).

Key elements of a whole-school and whole-system approach

Whole-school approach	Whole-system approach
Learning environment, focusing on creating a safe, supportive, and inclusive environment for learning	*Policies and governance frameworks* prioritising inclusion, success for all and well-being are aligned at all levels
Coherence across school priorities: inclusion and well-being are planned together as one strategy with shared goals, rather than delivered as separate, competing projects.	*Policy coherence and sequencing*: reforms across inclusion, well-being, pedagogy and assessment are aligned within a shared long-term strategy rather than launched as parallel initiatives.

Whole-school approach	Whole-system approach
Collaborative leadership, with school leaders promoting inclusion and facilitating collaborative decision-making processes that involve all stakeholders	*National or regional policies* on education funding, curricula, teacher training, and assessments *are consistent and co-ordinated* ([167])
Community engagement, multi-stakeholder partnerships, and actively engaging with parents and families, and other education and training stakeholders supporting learners inside and outside schools. This approach requires moving beyond a vision of parents as passive recipients of information and towards a genuine partnership where they are treated as partners with valuable expertise. It also involves fostering learner engagement through structured participation mechanisms (e.g. class and student councils, learner representatives in school governance bodies, regular learner consultations on school-life decisions). These mechanisms should include learners who are usually under-represented, so that learners are seen as key actors whose voices are incorporated into the school's life and decision-making processes.	*Inter-agency collaboration* enhances support for schools and learners, bringing together various governmental and non-governmental organisations, to ensure a holistic approach to inclusion and learning success (for example, a school collaborating with child protection services to support a vulnerable learner whose family is struggling in meeting basic nutrition needs; a school partnering with a local mental health charity to provide in-school counselling; a school working with a youth organisation to offer after-school mentoring). This is particularly critical in early childhood, where incorporating ECEC providers into community-school partnerships supports continuity of care and learning, especially benefiting marginalized groups such as Roma children (Vanderkerkhove at el 2019).
School-level reflection and self-evaluation feed into school planning, so that practice is adjusted on the basis of evidence (see Enabling factor 6).	*Feedback loops:* evidence from schools and municipalities informs policy adjustment, making reform iterative and continuous rather than purely top-down.
Networking/partnerships between schools and ECEC: structured links between settings ensure that pedagogy, expectations and support are aligned, so learners experience continuity rather than disruption as they move between them.	*Smooth coordination and collaboration across levels:* Abrupt transitions from ECEC to primary education, and from primary to secondary, with sharp changes in pedagogy and expectations, can hinder children's learning continuity and well-being. Greater alignment and collaboration across sectors is needed to support smooth, child- and family-centred transitions. Seen through a lifelong-learning lens, transitions are not breaks between isolated stages but points along a single learning continuum. Because transitions are also when learners most easily slip between services, this coordination should reach beyond education to the health and social sectors, so that necessary support is ensured.
	Key role of municipalities, ensuring horizontal and vertical cooperation, and promoting autonomy, trust, and flexibility within the educational framework

Persisting challenges

Inconsistencies in policy interpretation and application: international conventions advocate inclusion, but national laws often fall short for marginalised groups and rarely address intersectional inequalities or the barriers learners face at transitions (UNESCO, 2020; Dunajeva and Siarova, 2024). This fragmentation is particularly problematic in the ECEC sector, where "split systems" (with different

([167]) The multi-level governance of education systems makes coordination of reforms particularly important. As literature shows, co-ordinated reforms in different parts of a system have proven to be mutually reinforcing. However, as education systems involve multiple levels of government, implementation of a 'comprehensive reform' may be difficult to co-ordinate across different levels of the administration, and across multiple regional and local jurisdictions (European Commission, 2022).

governance for different age groups) often lead to inconsistencies in access, pedagogical continuity, quality, and funding, hindering a coherent approach to early childhood development.

Insufficient provision of ECEC: in some Member States, limited availability, affordability or uneven geographical coverage of early childhood education and care restricts participation, particularly among disadvantaged families, migrant and Roma communities, and children with disabilities. Because ECEC is foundational to later school success, gaps in access at this stage entrench inequalities before primary schooling begins.

Insufficient capacity to innovate and collaborate: limited and under-funded professional development, inflexible school organisation, high teacher-student ratios, curriculum overload and appraisal systems that reward academic results only all constrain a collaborative culture. Persistent staff shortages, driven by an ageing workforce and high workload, further reduce the time available for collaboration and improvement.

Cross-sector collaboration challenges and structural barriers: mismatched goals and priorities between education, health, social services and civil protection; bureaucratic and funding constraints; communication gaps; and conflicting organisational cultures. All these barriers can stall co-operation even where there is will to collaborate. Schools and teachers may also be reluctant to engage with civil-society organisations, youth workers and other external partners, owing to unclear regulatory frameworks, limited time and capacity, and varying levels of mutual trust, all of which can narrow opportunities for collaboration unless enabling conditions and clear mandates are put in place.

Negative perceptions and resistance to change: A successful implementation of a whole-school and whole-system approach requires attitudinal shifts, which are often hard to achieve (Schuelka, 2018). Such resistance to change may, for example, stem from deep-rooted biases towards certain groups of learners, such as those with disabilities or from marginalised backgrounds, impeding progress towards inclusive education and implementation of inclusive approaches (Pak and Parsons, 2020; Mac Ruairc, Ottesen, and Precey, 2013). This is also reinforced by the lack of representation of diversity among the school and education policy staff. Another source of resistance to change may be the stigmatisation of targeted support, or the perceived burden of adapting teaching practices to SEN learners (EU Working Group on Schools, Pathways to School Success, 2023-10-26).

A false dichotomy between well-being and academic achievement: A recurring challenge is the persistence of a "hierarchy of objectives" where academic performance is seen as more important than well-being. This often leads to well-being initiatives being sidelined or viewed as a distraction from core academic goals, even if fostering well-being directly contributes to better learning outcomes and a more positive school climate. In the context of ECEC, new knowledge based on neurosciences show that executive functions, self-regulation and metacognition are essential capacities to support children's later learning ([168]). However, there is growing concern that overemphasis on early literacy and mathematics, sometimes as a reaction to basic skills crises, can lead to the 'schoolification' of ECEC, eroding play-based, child-led practices crucial for creativity, motivation, and socio-emotional development.

Fragmented approach to digital challenges: Digital technologies may offer significant opportunities to enrich learning, widen access and personalise support but also bring additional issues (cyberbullying, excessive screen time and digital distractions, physical and mental health issues, etc). Schools are confronted to such issues and at the same time required to promote digital education and literacy but they often do it in isolation rather than through coordinated whole-school strategies that both capture the opportunities and manage the risks. This fragmentation is consequential: despite the global rise in cyberbullying, many schools still lack a comprehensive, whole-school digital well-being policy, so responses remain piecemeal rather than coordinated across the school community. Mobile phone restrictions, adopted by a growing number of Member States illustrate this: their most consistent effects concern classroom climate and attention rather than achievement, and they depend on how they are implemented (consultation with learners and families, clear exemptions and consistent enforcement), so they work best as part of a whole-school strategy rather than as a stand-alone rule (Crêteur et al., 2026). The 2026 Special Panel on Child Safety Online similarly stresses the need to combine age-appropriate protection with digital and media literacy and empowerment, while recognising that responsibility for children's online safety is shared across an ecosystem of digital-service providers, regulators, parents and caregivers, and educators (Fegert and Melchior, 2026). Artificial intelligence brings an additional challenge: according to the Council

([168]) Supporting children's foundational skills for a strong start to school | OECD.

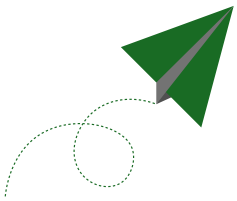
conclusions AI may undermine critical thinking (particularly through dependence on generative tools), distract young learners through the excessive, non-purposeful use of AI-enabled tools, and widen digital divides (Council of the European Union, 2026). At the same time, these technologies can bring substantial benefits when used purposefully: according to the same Council conclusions, AI can enhance teaching and learning by supporting more inclusive approaches, improving accessibility for disadvantaged learners, enabling more individualised teaching and assessment, and improving administrative efficiency, thereby freeing up time for teaching and learning. **The task for a whole-school approach is therefore not simply to restrict digital technologies, but to create the conditions for their safe, purposeful and developmentally appropriate use, harnessing their educational benefits while managing risks in a coordinated way.**

A persistent gap between policy or legislative objectives and actual institutional practices regarding parental and learners' engagement: While legal frameworks in many countries grant participatory rights to families and learners, schools often fall back on tokenistic forms of participation rather than fostering genuine partnerships with families and meaningfully engaging with learners. Student councils are widely provided for in regulation, but they often have limited influence over decisions, deal with a narrow range of issues, and do not always represent the diversity of the learner population. Building partnerships with families is essential to tackle complex issues such as digital well-being or cyberbullying, yet parental engagement remains an issue in most countries. Families from disadvantaged or migrant backgrounds are less likely to engage and may be labelled "hard-to-reach" instead of prompting schools to adapt their outreach. At the ECEC level barriers persist for children with disabilities, linguistic minorities, and those with migrant or refugee backgrounds. Inclusive practice and outreach to families, especially the most disadvantaged, are not yet systematic.

Lack of adequate resource allocation and lack of investment in transformative change. Schools may struggle to provide necessary support, training, and infrastructure, limiting their ability to create inclusive learning environments. At the system level, a lack of investment prevents cohesive coordination and transformative reforms, perpetuating educational inequalities.

2. Needs identification

What is it about?



This enabling factor is about detecting learning, developmental and well-being needs at an early stage, and identifying learners at risk of struggling with basic skills acquisition, underachievement, disengagement or early leaving, so that timely and individualised support can be put in place before difficulties become more serious. Early identification is equally important for high-achieving learners, whose potential can go unrecognised and unmet where provision is not designed to challenge them. It is preventative rather than reactive and grounded in every child's right to thrive. Identifying additional needs also helps make specific groups visible to policymakers and practitioners (Simon & Piché, 2012).

Needs identification is a continuous process rather than a one-off event: because learners' needs are dynamic and evolve over time, identification is iterative (revisited as children progress and woven into everyday *formative assessment*) so that support is adjusted as needs change. In VET, needs identification can be continuous and shared across learning settings. VET providers may combine formative assessment of skills and well-being with structured feedback from workplace mentors. Moreover, identification is a starting point, not an end in itself: it improves outcomes only when acted upon. It therefore relies on professional capacity to be done well (Enabling factor 4) and on data systems to make needs visible (Enabling factor 6), and it feeds directly into inclusive curriculum and pedagogy (Enabling factor 3) and the resource allocation (Enabling factor 5) that turns identified needs into concrete support.

Why does it matter?

Without identification, needs stay invisible – and invisibility is itself a form of exclusion. Children can be excluded not only in the classroom but by their absence from the data collected on learners; lack of data both results from and reinforces that invisibility. Early, accurate identification of special education needs (SEN) or other needs makes specific groups visible to policymakers and practitioners and allows support to be provided before difficulties widen into underachievement, disengagement or early leaving. The same act of identification, done badly, carries real risks – labelling, stigma, self-fulfilling low expectations. Needs identification is, therefore, a delicate balance between the necessity of understanding specific educational requirements and the risk of oversimplification and labelling.

Moreover, besides triggering additional help, effective need identification continuously feed back into universal provision (the teaching, curriculum and environment offered to all learners) so that recurring needs reshape and improve education for all. As such, needs identification also matters for learners who may never be formally singled out: the patterns this process reveals show where universal measures should be strengthened or adapted, which is a more preventative measure than simply multiplying individual interventions.

How can it be done?

Effective needs identification combines different mechanisms:

(1) Standardised frameworks such as those proposed by the International Classification of Functioning Module, Disability and Health (ICF) ([169]), the UNICEF/Washington Group on Disability Statistics Child Functioning Module ([170]), and the OECD classification system ([171]) give consistency and comparability across regions, which matters most in decentralised systems.

(2) Participatory and observation-based methods complement them, especially in ECEC: pedagogical documentation and the "mosaic approach" ([172]) draw on children's drawings, photos, staff observation and parent interviews to capture a young child's world (Finnish Education and Evaluation Centre, 2022).

(3) Early warning systems combine quantitative indicators – attendance, performance, behaviour – with qualitative insight from teachers, counsellors and families to flag disengagement risk early (Cedefop, 2022; OECD, 2026). Attendance is a particularly useful early signal, because absence patterns often precede underachievement and early leaving; the aim is to understand why a learner is absent, not only to record it.

(4) A multidimensional scope extends identification beyond academic attainment to socio-emotional, neurological and external factors such as language barriers.

(5) Multidisciplinary teams (see Enabling factor 5) ensure medical, educational and social aspects of a learner's needs are considered together.

Two conditions run through all five mechanisms: the systematic involvement of learners and their families, including parental support programmes that help parents understand and support their children's learning at home (Enabling factor 1); and teacher capacity (see Enabling factor 4), since teachers are central to identification and need training and clear responsibilities to carry it out (Smeets and Roeleveld, 2016). It is, therefore, essential to develop trainings and define clear

([169]) World Health Organization, International Classification of Functioning, Disability and Health (ICF), WHO, Geneva, 2001.
([170]) UNICEF and Washington Group on Disability Statistics, Module on Child Functioning, UNICEF, New York, 2016.
([171]) OECD, Students with Disabilities, Learning Difficulties and Disadvantages: Policies, Statistics and Indicators, OECD Publishing, Paris, 2007.
([172]) The mosaic approach is a participatory, multi-method framework for listening to young children, developed by Alison Clark and Peter Moss. It combines conventional observation with tools that let children contribute their own perspectives, such as photographs they take, drawings, and child-led tours of their setting, treating these different 'pieces' as a mosaic that together conveys the child's experience. Clark, A. and Moss, P. (2001), Listening to Young Children: The Mosaic Approach, National Children's Bureau for the Joseph Rowntree Foundation, London.

responsibilities for teachers, given their central role in the identification of additional needs (Smeets and Roeleveld, 2016; Aktan, 2020).

Persisting challenges

Identifying (invisible) vulnerabilities: One of the fundamental challenges of education is the impossibility of neatly distinguishing between learners with and without special needs. Many forms of vulnerability do not present obvious signs and are often invisible (Moyse & Porter, 2015). Education systems need to understand that vulnerabilities can manifest in diverse and subtle ways.

Hidden digital vulnerabilities: Cyberbullying, online addiction and exposure to harmful content are often invisible to educators. Shame and isolation keep victims from reporting Murphy, 2024), and fast-changing platforms outpace educators' awareness.

Risk of labelling: Targeting specific groups in education can reduce children to labels, which can, in turn, lead to stigmatisation and reinforce segregation (Silver, 2015). Labels, such as learning difficulties, can trigger low expectations and become self-fulfilling prophecies. By focusing on the exclusion of specific groups, educational practices highlight "markers of difference", creating distinctions by comparison to an implicit norm (Armstrong et al., 2010; Kauffman & Badar, 2014). In early childhood, this risk is particularly acute, as developmental variations can be misconstrued as permanent deficits.

Risks with grouping: Practices that group learners based on predefined categories (often requiring learners to fit into rigid classifications during the identification phase), risk overlooking additional or overlapping needs. In addition, by focusing on specific groups, systems may reinforce segregation and miss the broader goal of creating an inclusive environment for all learners.

Risk of excessive bureaucracy: Developing standardised tools can involve complex administrative processes and bureaucracy. In some countries, identifying SEN is a very formal, highly bureaucratic act. While this structure aims to prevent over-identification, it can also create administrative burdens that hinder efficiency and responsiveness.

Diagnostic inflation: The increasing number of learners placed in special classes, as seen in some countries (European Commission, WG Equality and Values, 2024), often stems from parental advocacy for additional support, driven by the perception that diagnoses lead to better resources. This trend can lead to pressure on the system. Inconsistent diagnostic criteria and varying incentives for classification create inflated numbers and unreliable data.

3. Curriculum and pedagogical approaches



What is it about?

This enabling factor is about designing curriculum and teaching, learning and assessment processes that acknowledge and respond to learners' differences in inclusive settings from the outset. Its guiding principle is that the key element of inclusion is not individualisation but the diversification of the educational provision (Imaniah and Fitria, 2018, p. 2). This also requires looking beyond the curriculum as a formal policy document to how it is interpreted and enacted in schools and classrooms. The forthcoming ENESET report on curriculum design stresses that national curriculum frameworks are only one part of the picture: their effects depend on how teachers and school leaders translate them into practice, and on the professional capacity, resources, support structures and local conditions available to do so (Priestley et al., forthcoming).This translates into pedagogical approaches that are adaptable to the diverse needs and learning paces of all learners, which is crucial for acquisition of basic skills and avoiding gaps later on. In ECEC this means a flexible, play-based framework that starts from each child rather than adapting a fixed set of content. Pedagogy is where inclusion finally reaches the learner, but it needs accurate needs identification to know who requires what (Enabling factor 2), professional capacity to deliver adaptable teaching (Enabling factor 4), adequate resource allocation (Enabling factor 5) and the evidence from monitoring and evaluation (Enabling factor 6) to know which approaches actually work.

Why does it matter?

Curriculum and pedagogy are essential dimensions where inclusion either happens or not. Socio-economic background remains a decisive factor in basic skills performance, and underachievement is far more frequent among disadvantaged learners. By adopting inclusive, personalised and flexible teaching methods, teachers can effectively help overcome learning barriers learners may face, promoting basic skills for all (Agius, 2024). Additionally, the adaptation of teaching approaches to **address the evolving needs of learners** ensures that inclusion remains a dynamic and responsive aspect of the educational experience (UNESCO, 2024; NCSE, 2024). Importantly, emerging evidence also cautions against assuming that any single curriculum model will, by itself, improve basic-skills outcomes. The forthcoming ENESET analysis finds substantial variation in achievement among countries with similar curriculum structures, pointing to the importance of how curricula are enacted and of the wider conditions that support teaching and learning (Priestley et al., forthcoming).

How can it be done?

Inclusive pedagogical approaches are defined by **sensitive and adaptable teaching methodologies** that reinforce the principles of inclusive education and meet the varied needs of learners (especially SEN learners) (Batu et al., 2017). **Universal design for learning** (UDL) is fundamental in ensuring a more inclusive curriculum and tackling inequalities. EASNIE situates UDL within a broader repertoire of curriculum innovation (digital, personalised, cross-curricular and competency-based designs) which together aim to foster learner voice, empathy and flexibility (EASNIE, 2026a). In sum, inclusive pedagogy and UDL are fundamental elements of this enabling factor: instead of designing adjustments for some, curriculum and assessment are designed from the outset to offer flexible pathways responsive to the full range of learners' strengths and needs, with inclusion treated as a core design principle rather than an add-on (EASNIE, 2026a). This systemic perspective extends to coherence: EASNIE and Prestley et al (forthcoming) also stresses that curriculum, pedagogy and assessment are not parallel strands but elements that must be carefully aligned. Inclusive principles should run consistently across content, teaching and the way learning is assessed.

Inclusive curriculum and pedagogy require:

1) **Adaptable pedagogy**: sensitive, flexible teaching, learning and assessment methods adjusted to learners' diverse needs and paces. This includes a wide range of evidence-based approaches such as differentiated instruction, explicit teaching, cooperative learning, scaffolded instruction, and inquiry-based methods. Purposefully blending different learning tools (non-digital and digital) and environments (school, cultural institutions, companies, outdoors, etc.) help respond to diverse needs, strengthen autonomy, collaboration and personalised learning.

2) **Social-emotional learning (SEL)**: social-emotional learning has a strong evidence base for improving equity and inclusion (Lee et al., 2023) and overall learning outcomes. In ECEC social-emotional development is not an add-on but the very core pedagogical approach. High-quality ECEC curricula are designed to nurture children's well-being and emotional skills, recognising that long lasting learning require a condition of well-being. At school level, effective approaches embed emotional and life skills across subjects rather than taught in isolation;

3) **Authentic learner participation**: learners are given real agency (i.e. co-creating success criteria for lessons, influencing curriculum choices, reshaping the school environment) so that their voice leads to tangible change at classroom level (co-creating success criteria, influencing curriculum choices) and at school level, through class and student councils or similar mechanisms that give learners a say in everyday school life. Age-appropriate forms of participation can start in primary education and ECEC;

4) **Inclusive assessment**: complementing summative testing with *formative assessment*, which tracks learning as it happens and builds a feedback culture where mistakes are opportunities for growth, and with *ipsative assessment*, which measures a learner against their own prior performance and is especially motivating for those who consistently score below their peers. Families are partners in assessment too: a shared understanding of what formative and ipsative assessment mean helps families support learning at home and reinforces the shift away from ranking students towards promoting their personal growth.

Persisting challenges

Risk of 'schoolification' in ECEC: Pressure for school-readiness can push formal, adult-led instruction that is developmentally inappropriate, undermining the play-based, child-centred pedagogy crucial for holistic development.

Curricular fragmentation and overload: Schools face "initiative fatigue" when new priorities are added as extra layers rather than woven into a coherent core. This can leave teachers navigating multiple priorities, frameworks and expectations that do not always reinforce one another. The forthcoming ENESET report similarly suggests that the effectiveness of curriculum depends not only on its formal design but on coherence across subjects and stages, its alignment with assessment and accountability arrangements, and the capacity and support available to teachers and schools to enact it (Priestley et al., forthcoming). The risk is therefore not that any single priority is unwelcome, but that an ever-growing list of additions crowds the timetable and fragments teaching and learning. Literacy, mathematics and socio-emotional competence should not be treated as competing goals among many, but as foundational capabilities on which further learning, including transversal competences, depends.

A mindset that treats assessment as ranking: Families and teachers alike often see assessment as a way to assign marks rather than to support learning and continuous improvement. This mindset hinders the thorough implementation of innovative pedagogical approaches which are perceived as deviations from the core curriculum.

Challenging conditions in schools: Teachers who face difficult conditions, such as large classes, staff and resources shortages or overloaded curricula, might have difficulty integrating, for example, new competence-based curricula or new forms of assessment.

Insufficient involvement of Higher Education institutions and other key education stakeholders: Higher Education Institutions play a critical role in advancing inclusive practices, first and foremost through initial teacher education, preparing future teachers to teach all learners and embedding inclusive, evidence-based approaches in curriculum and pedagogy from the outset of their careers. They also contribute by researching, piloting and validating successful approaches, and by providing ongoing education support. Their insufficient involvement in these roles weakens the pipeline of inclusive practice across the system.

4. Building professional capacity

What is it about?



This enabling factor is about equipping school leaders, educators and support staff with the skills, knowledge and conditions to help every learner acquire the necessary basic skills and succeed at school. It is about enabling educators to develop a coherent approach to teaching, learning and assessment, to gather and soundly interpret evidence of learning and adapt lessons to different needs. Empowering education staff is also closely connected to their working conditions, such as manageable workload, well-being promotion, recruitment and retention. Without good working conditions, learners' acquisition of basic skills and school success are significantly endangered.

Professional capacity is a key enabler of the framework: early needs identification (Enabling factor 2) and inclusive curriculum and pedagogy (Enabling factor 3) become operational only when teachers, leaders and support staff have the skills, time and conditions to deliver them. Professional capacity also entails enabling teachers and school leaders to act as curriculum makers: to interpret curriculum goals, exercise professional judgement and adapt teaching coherently to learners and local contexts. The forthcoming ENESET report on curriculum design stresses that successful curriculum enactment depends not only on teachers' knowledge and skills, but also on the structural and cultural conditions that enable them to exercise professional agency (Priestley et al., forthcoming). Capacity in turn depends on the resource allocation (Enabling factor 5) that funds

training and collaboration time, and on the whole-school approach (Enabling factor 1) that makes collaboration a core objective.

Why does it matter?

Teachers, school leaders and support staff are the decisive factor in whether inclusion and well-being are realised in practice. Targeted teacher training is fundamental to inclusive environments (Crispel & Kasperski, 2021), and leaders with the right competences will set a school culture in which diversity and inclusion are treated as natural features of every educational setting rather than as a problem. Building professional capacity also protects educators themselves: leadership that values staff well-being, manages workload and builds collaboration, will reduce stress and turnover, which is critical for stable, high-quality provision.

How can it be done?

Building professional capacity rests on three interconnected conditions.

First, **strong school and ECEC leadership**: leaders play a crucial role in promoting and sustaining holistic and collaborative school vision and culture, integrating inclusive practice into daily school life, building school capacity for digital technologies, and creating a culture that values and promote staff and learner well-being. To be able to promote basic skills for all, leaders need dedicated professional development and support (Óskarsdóttir et al., 2020).

Second, **high-quality training and continuing professional development for educators and staff**: both initial teacher education (ITE) and continuous professional development (CPD), are crucial for building the skills and knowledge needed to support learners at risk of exclusion, while combining targeted help for vulnerable learners with broader, holistic approaches that meet the needs of all learners. Effective professional development programmes are tailored to teachers' real needs, extending to support staff, VET trainers and in-company mentors, and explicitly include the skills to build collaborative relationships within the school, with families and to create space for learner voice. This includes preparing all teachers, including ECEC staff, to support newly arrived learners with the language of schooling and to use language-sensitive approaches in every subject (Siarova, 2022). Professional learning is particularly effective when it is collaborative, participatory and closely connected to curriculum materials and teachers' everyday practice. The forthcoming ENESET report also highlights collaborative enquiry approaches and professional learning communities as means of strengthening teachers' curriculum-design capacity, professional confidence and ability to translate reform into coherent practice (Priestley et al., forthcoming).

Third, **collaboration and multidisciplinary teams**: teachers, psychologists, social workers and other specialists working together within and around the school, which is particularly important for mental health and well-being (Bohnenkamp et al., 2023), as well as for tackling diverse and complex learning needs. This reflects what EASNIE calls "connective professionalism" (teachers working across disciplines, sectors and professional fields, and engaging specialists, social services and community partners) which positions professional learning as system-focused endeavour rather than a purely individual one, strengthening the schools' collective capacity to respond to learners' diverse needs and potentialities (EASNIE, 2026a).

Persisting challenges

Teacher shortages present a significant barrier to achieving equitable, effective and inclusive education. An ageing workforce and declining interest in the profession – driven by working conditions, low recognition and limited progression – leave too few trained teachers to implement inclusive practice. TALIS 2024 underlines the scale of the problem: on average across OECD systems, around 23% of teachers work in a school where a shortage of qualified teachers is reported to limit the capacity to provide quality instruction, and one in five teachers under 30 plan to leave the profession within five years, rising to around half of young teachers in some systems (OECD, 2025). Lowering training requirements to fill posts further weakens capacity. Insufficient diversity within the profession also hinders culturally responsive teaching. The ECEC sector is hit hardest, with severe shortages threatening both access and quality.

Teacher stress and burnout: Excessive administrative tasks, accountability pressure and discipline challenges drive stress and burnout (Agyapong et al., 2023), pushing teachers out of the profession

and harming education quality and learner well-being. TALIS 2024 finds that stress is more strongly associated with constant, unsupported change, particularly where teachers feel overwhelmed by frequent initiatives or are asked to implement reforms without adequate support (OECD, 2025). In ECEC, demanding conditions and low recognition make burnout and turnover particularly acute.

Limited professional development in inclusive education and well-being. Despite a more diverse training offer, diversity and inclusion are still poorly integrated into ITE, and often teachers feel that the curricula of ITE courses are disconnected from the reality of schools. Participation in relevant CPD remains low, also because shortages make it hard to release teachers. Even when part of the training content, inclusion and well-being are too often treated as generic theoretical add-ons rather than being embedded across training and tailored to daily practice.

Insufficient teacher preparation for the digital age: Many teachers lack training in digital tools, AI and challenges such as cyberbullying. In a sample of 11 EU countries, 57% of eighth-grade teachers wanted more professional learning on integrating ICT, and 64% wanted support to use ICT for personalised learning (IEA, 2023). TALIS 2024 confirms that "skills for using AI for teaching and learning" is the area where the highest share of teachers across OECD education systems (29%) report having a high level of professional learning need.

Weak expertise in cross-curricular basic skills: Teachers with strong subject knowledge often lack confidence in teaching literacy, mathematics, science, digital and citizenship skills within their subject. This is acute in secondary education, where basic skills are not seen as every teacher's responsibility. This results in missed opportunities to correct deficiencies from the past and reinforce foundational skills across the curriculum. Advanced subject knowledge is inaccessible without foundational literacy and mathematics skills. Consequently, a learner's struggle with reading is not just a problem for the language teacher, but a barrier to success across the entire curriculum.

Insufficient collaboration between teachers, schools, and external stakeholders remains a significant barrier to inclusion and well-being promotion (due to curriculum overload, lack of an enabling environment and limited capacity, among other challenges). Despite significant efforts to improve collaboration and create multidisciplinary teams, gaps in communication and cooperation continue to undermine efforts to address the diverse needs of learners. Teachers are often pushed to work in isolation, without robust partnerships between each other and with local communities and social/health services.

A non-collaborative mindset towards families: Staff may see parents and families as passive, intrusive or a source of conflict rather than as partners, and often lack the confidence, tools and training to build relationships with families from diverse backgrounds or to move beyond superficial consultation. In ECEC, building reciprocal relationships with families is a core professional competence that staff are rarely trained for.

5. Resource allocation



What is it about?

This enabling factor translates needs identification into concrete, timely support. It shifts resourcing from a reactive, category-driven model – where support is unlocked only after a diagnosis, threshold or annual cycle – to a **proactive, flexible and needs-weighted resourcing**, deployed when learners need it most. In practice that means predictable funding for inclusion and well-being, plus adjustable top-ups triggered by context such as language needs, disability, rurality or socio-economic disadvantage.

Resource allocation is the hinge between identification and action: it should follow the needs surfaced under Enabling factor 2 and the evidence generated under Enabling factor 6, and it is what makes professional capacity (Enabling factor 4) and inclusive pedagogy (Enabling factor 3) materially possible.

Why does it matter?

A reactive model of resource allocation slows the response and can entrench inequity since structured support is often deployed only after a learner has already fallen behind. A proactive model renders support easily accessible and lets schools and education staff act before gaps widen. Crucially, more inclusion does not always require more money: some settings improve their inclusion indicators not by retaining more resources but by distributing them better (OECD, 2023).

How can it be done?

Proactive resource allocation can be implemented through the following measures:

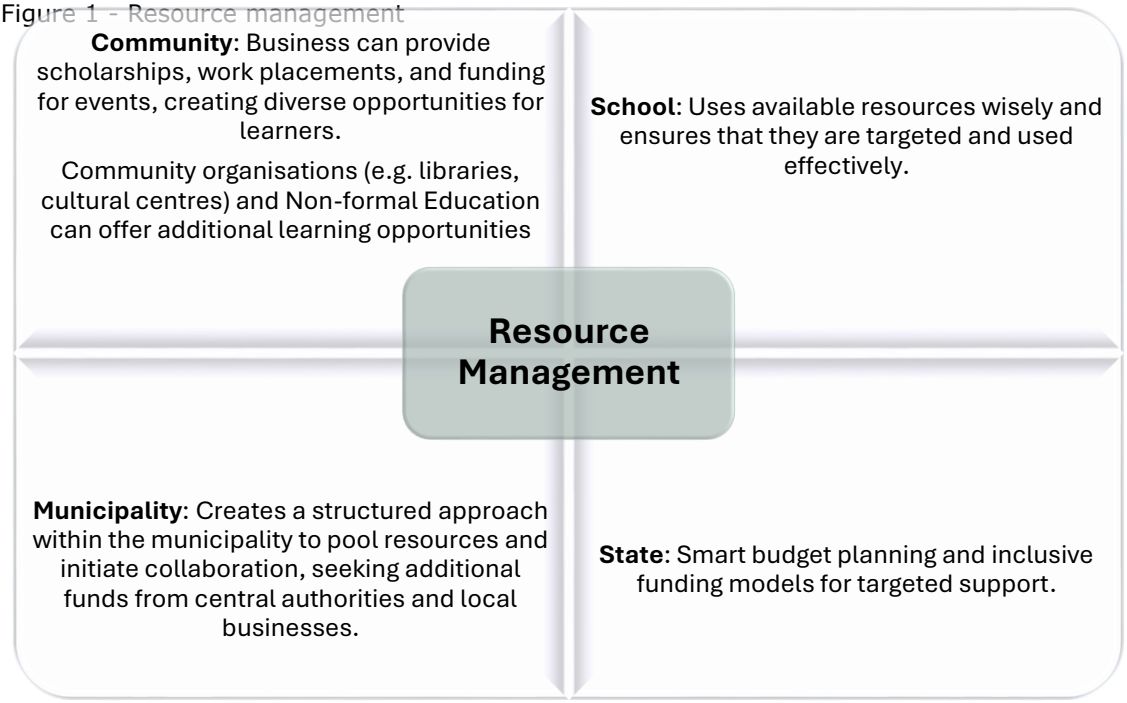
a. **Prioritising investment in people and time:** co-teaching and classroom assistants, counsellors and psychologists, language and inclusion specialists and dedicated family liaison roles, backed by protected collaboration time and access to resource centres that help mainstream staff adapt practice without relying on labels (EASNIE, 2023b).
b. **Smart funding:** the intentional use of resources to maximise equity and learning impact. In practice, it means **targeting**, **testing**, **tracking**, and **scaling**: directing funds to interventions with a clear theory of change; piloting with safeguards; monitoring cost-effectiveness and equity results; and scaling what works while sunsetting what doesn't. It combines needs-weighted allocations with flexible school/cluster envelopes, ties a small share of funding to transparent outcome indicators (e.g., participation, progress of the lowest-attaining learners, reduction in segregation), and builds in scale/stop rules and evaluation cycles.
c. **Resource sharing:** pooling expertise and facilities across groups or clusters of schools reduces duplication, helps small and rural schools access high-cost resources, and mitigates teacher shortages through shared itinerant specialists (e.g. language support, lab technicians, SEN specialists).
d. **Supported decentralisation:** giving clusters of schools and municipalities room to tailor support locally, paired with national equity standards and transparent monitoring so that local autonomy does not become territorial inequality.

Engaging families is also a key part of how resources reach learners. Dedicated family liaison roles are effective investments for reaching families who are otherwise less likely to engage. Resource-allocation decisions should also be transparent to parents: families need accessible information on the support available to their child, and parents and learners should have a voice in participatory budgeting and in local decisions on how shared resources are used.

Effective resources allocation helps close the digital divide and fund safe digital learning environments – not only devices and connectivity but teacher training, digital content, safety infrastructure and online well-being support, since the access gap between regions remains significant (Kolupaieva and Tiesheva, 2023).

Adopting a whole-school and whole-system approach ensures that resources are not only distributed effectively but also utilised in a coordinated manner to support the diverse needs of all learners (see image below). This approach enhances the sustainability and impact of inclusive education initiatives by leveraging the strengths and contributions of various stakeholders towards common educational goals.

Figure 1 - Resource management



Source: (EEA WG on Pathways to School Success, 2024-01-18)

Persisting challenges

Reluctance to adopt a paradigm shift: Moving to flexible, inclusive resourcing requires a reorientation of mindsets, cultures and policymaking, not only of funding formulas. In ECEC, this challenge is amplified by fragmented governance, particularly in "split systems" (with different funding streams for different age groups and different ministries responsible) makes a coherent resourcing strategy for the whole 0–6 range especially hard (Hulpia et al., 2024).

Weak coordination and under-empowered municipalities: Transitioning to the decentralised and flexible system requires consistent inclusive vision and coordination. Fiscal incentives and income redistribution among municipalities or regions are critical, alongside incentives for well trained teachers to choose to work in disadvantaged areas (Mangiaracina, 2016, p. 28). While decentralisation can empower municipalities, it also risks creating local disparities in access and quality if not accompanied by a strong national framework and adequate, equitable funding mechanisms to support all local authorities.

Difficulty turning evidence into financial support to enable system change: Flexible funding needs timely data and credible evidence on what works to guide where new money should go, implying building capacity for data literacy and evaluation. However converting data into budgeting may be held back by privacy concerns, infrastructure gaps and limited analytical capacity at school or municipal level. In addition, national action plans often lack concrete financial targets, so policy commitments do not translate into investment.

6. Data collection, monitoring and evaluation



What is it about?

Regular data collection and monitoring are necessary for building and maintaining inclusive education systems. Well-functioning, systematic data and monitoring systems make it possible to understand trends over time, see differences between schools and regions, identify where gaps and disparities persist, target support where it is most needed, and inform families about the support available to them. They also help ensure that policy commitments are translated into practice and support the transparency of public spending. Putting such systems in place is itself a significant step forward, and many education systems have yet to achieve it.

Building on these foundations, data can also be used to evaluate the effectiveness of policies and the efficiency of resource allocation, and to support continuous improvement by showing 'what works.' This 'what works' question goes beyond routine monitoring. The ultimate aim is to develop a culture of evaluation in which major policies and programmes are tested with credible methods, including counterfactual impact evaluations (e.g. randomised or quasi-experimental designs, where feasible), so that systems can learn what works, for whom, and at what cost. This evidence then needs to feed back into funding and practice, scaling what works, adapting what needs to improve, and redesigning or discontinuing what proves ineffective.

While many countries monitor parts of their education systems, few have a coherent system that maps the information gathered against system-wide objectives to plan future data collection, and fewer still evaluate the impact of their reforms (EASNIE, 2025; drawing on UNESCO, 2016, and OECD, 2015). What is needed is not a set of separate tools but a coherent and purpose-oriented data ecosystem embedded in the education system (multi-level and multi-stakeholder, linked to national priorities, and underpinned by a culture of trust and shared accountability) so that data from all sectors and levels combine into a rounded picture of system and school development (EASNIE, 2025).

Data collection, monitoring and evaluation are the whole framework's feedback loop: the evidence they generate is what lets resource allocation be effective (Enabling factor 5), needs identification be timely (Enabling factor 2), pedagogy be evidence-based (Enabling factor 3). This closes the cycle back into the whole-system approach (Enabling factor 1) and the idea of "systems that learn", as set out in the concluding chapter.

Why does it matter?

Without reliable data and evaluation, systems cannot tell whether inclusion policies are working, nor where gaps persist. Funding decisions end up being based on perception rather than evidence. Good data also serves people directly: it informs teachers and support staff – especially at transitions between schools – and it informs learners with individual needs and their families about the outcomes of the support available. Data collection also serves the transparency of public spending. Embedding systematic evaluation and reflection mechanisms within curriculum and pedagogical design is essential to ensure that inclusion, equity, and well-being objectives are effectively met ([173]).

How can it be done?

Effective monitoring and evaluation require five interconnected elements:

([173]) Cedefop's tools for creating a culture of evaluation, developed within the VET Toolkit for Tackling Early Leaving, offer practical guidance to policymakers, school leaders, and practitioners on how to plan, implement, and monitor education initiatives. The Evaluation Plan for Policymakers helps to structure evaluation processes and identify indicators of effectiveness, while the accompanying Self-Reflection Tool supports schools and teachers in assessing their own practices and fostering a culture of evidence-informed improvement (Cedefop, 2022). Integrating such approaches into curriculum development and teacher practice strengthens feedback loops between policy and classroom realities, ensuring that pedagogical innovation translates into meaningful learning for all.

1. **Relevant indicators**: a carefully chosen set of quantitative and qualitative indicators covering needs, inputs, processes, outputs, outcomes and impact, collected systematically at school, municipal and national level.
2. **Mixed and complementary data sources**: administrative data supplemented by surveys, school inspection and self-assessment tools that help schools reflect on learners' needs and the impact of their interventions. Participatory methods can extend these sources to dimensions that standard data miss: EASNIE's Learner Participation in Inclusive Education work, for example, uses the "photovoice" methodology, in which learners themselves generate and help analyse data through photography, to monitor and evaluate learners' socio-emotional participation, particularly among those most vulnerable to exclusion (EASNIE, 2026b).
3. **Transparent feedback loops:** data collected from learners and families must visibly translate into change and be communicated back to them, or participation becomes tokenistic and aggravates disengagement. Student councils and other representative structures can serve as a regular channel both for collecting learners' views and for reporting back what changed as a result.
4. **A culture of evaluation, coupled with adequate data literacy:** testing major programmes with credible research designs, proportionate to the size of the investment, and sharing findings in short, clear and accessible reports, while ensuring that educational authorities and professionals have the critical, ethical and practical capacity to interpret, challenge and translate data into sound pedagogical and policy decisions.
5. **Responsiveness and adaptation over time:** monitoring systems need to be reviewed and updated so that indicators and methods keep pace with a changing environment, including new digital-age dimensions of well-being and school success (e.g. online safety and healthy technology use). For digital and AI tools, this means tracking learning outcomes assessed without AI support rather than tracking usage or satisfaction alone – which can be high even when learning is weaker (Crêteur, 2026; Theis et al., 2026).

Persisting challenges

The monitoring–labelling tension: Monitoring requires identifying needs, yet categorical descriptions of SEN risk labelling. EASNIE recommends the non-categorical term "learners' needs" (EASNIE, 2022), instead of special education needs, which are often attached to a certain health/disability label. UNESCO notes that categorisation that does not lead to labelling at classroom level is important to make vulnerable groups visible.

Data protection constraints: The rigid interpretation of data protection regulations can pose serious challenges to collecting and analysing data. For instance, regulations can restrict collection of personal data and educational needs are often considered under this category. Regulations can also restrict the mode of analysis and only allow the publication of highly aggregated information, which does not provide sufficient information for educational staff and families to take informed decisions.

Incomplete data: Data collected are often incomplete and miss relevant background characteristics (home language, functional needs, care experience, rurality). In some cases, the categories of needs registered in the system are insufficiently detailed to allow for meaningful planning, and often there is little scope for looking at intersectionality of needs as well as at correlations between other forms of disadvantages and special needs. Currently, no standard categorisation of SEN exists at the European level, but inconsistencies in definitions and categories used often exist at the country level, where parallel, non-synchronised data collections and unclear responsibilities for monitoring can create further challenges. Attendance data is another illustration of incomplete data: definitions and thresholds for problematic absence differ between systems (OECD, 2026), and national data may be incomplete or impossible to link to learners' socio-economic background (Smyth, Moya and Darmody, 2026).

Scarce outcome data: Data on outcomes and effects is particularly scarce, restricting analysis of what works. Success indicators must go beyond academic achievement to reflect well-being, learners' experiences and parents' views.

Insufficient data literacy: Schools, and sometimes ministries, lack the resources and skills to make sense of data, judge its quality and limitations, and translate it into instructional decisions. A specific challenge in the ECEC sector is the fragmentation of data collection due to "split" governance

systems, which hinders a coherent understanding of a child's early development journey. Furthermore, there is often a lack of age-appropriate, validated tools for monitoring young children's experiences and well-being, and a need to build the data literacy of the ECEC workforce (Hulpia et al, 2024).

A missing culture of evaluation: Major programmes rarely use credible counterfactual designs, evaluation is not proportionate to investment, and findings are seldom shared in an accessible manner. As a result, funding and practice are **not systematically steered by proven effects**, slowing improvement and wasting resources ([174]).

Need to balance data requirements with reporting burden: A key challenge is to balance the need for comprehensive and policy-relevant data with the need to minimise reporting burdens on schools and other stakeholders. This includes mapping existing data collections to avoid duplication.

Concluding remarks for Part 2

Ensuring stronger basic skills for all learners requires sustained commitment, coherence and courage across all levels of the education system. The evidence and practices reviewed throughout this report underscore that inclusion, equity, and well-being are not separate goals but *mutually reinforcing conditions* for high-quality education and stronger basic skills for all learners. A high-performing system is one that allows every learner, regardless of background, ability, or educational pathways, to thrive, develop basic skills and contribute meaningfully to society.

Improving basic skills for all learners depends on turning broad goals into coherent policies, stable funding and collaborative professional cultures. Progress is strongest where countries combine ambitious reform with sustained investment and a shared commitment to inclusive, high-quality education.

For the acquisition of basic skills to improve, education systems must become learning systems themselves. Systematic feedback loops, linking practice, research and policy, allow innovations to be scaled up when they work, adapted when needed and discontinued when ineffective. The latter links to the advisory and support services mapped in Part 3 of this staff working document.

Teachers and school leaders are central to this effort. Their expertise, well-being and professional development are key to improving learners' basic skills. At the same time, learners should be treated as active participants in education, with their voices and experiences helping shape learning.

Basic skills also need support beyond the classroom. Cooperation with health, social and employment services and civil protection, as well as better links between different education sectors and pathways, helps ensure that learners receive the support they need throughout their lives.

Overall, the message is that investing in inclusive, prepared and resilient education systems is essential to strengthen basic skills, respond to social and economic challenges, and support Europe's future.

([174]) Cedefop's work on developing evaluation plans and tools for policymakers and practitioners offers valuable guidance on how to strengthen this culture of evaluation. Through the VET Toolkit for Tackling Early Leaving, Cedefop provides concrete frameworks, step-by-step evaluation plans, and self-reflection instruments to help education and training systems systematically monitor, assess, and improve their inclusion strategies. Embedding such tools in national and institutional practice can help ensure that evaluation becomes an integral part of policy cycles – linking evidence with decision-making and improving outcomes for learners, particularly in vocational education and training (Cedefop, 2022).

Part 3: Mapping of advisory and support services

This synthesis [175] maps advisory and support services for basic skills teaching and learning across the 27 EU Member States. It identifies the organisational models in place, the functions these bodies typically perform, the factors that enable or constrain their effectiveness, and the policy frameworks and gaps that recur across systems. The aim is not to rank countries but to draw out cross-cutting patterns that can inform EU-level cooperation on basic skills.

1. Typology and cross-country patterns

Common organisational models

Four broad organisational types recur across the 27 EU Member States, with **project-based or temporary arrangements** layered onto nearly all of them as a recurring cross-cutting feature rather than a distinct type of their own. Those four distinctions are: single national-level agency/centre model, distributed model across multiple bodies, inspectorate-led model, and centralised ministry-led model with/without dedicated agencies.

Examples of countries belonging to the **single national-level agency/centre model** are Czechia (National Pedagogical Institute (NPI)), Finland (National Agency of Education (EDUFI)), Estonia (Education and Youth Board (Harno)), Lithuania (the National Education Agency (NŠA) created in 2019 by a merger of six former agencies) and Slovakia (National Institute for Education and Youth (NIVaM)). All these organisations concentrate most of the advisory and support functions for basic skills in a single body. Bulgaria is moving in the same direction: its Institute of Education, created in December 2024 by merging three previously separate centres, aims to acquire the role of a driver for analytical expertise, innovation and modernisation of education policies.

The most common pattern observed is the **distributed model across multiple bodies,** observable in Belgium (both the Flemish and French-speaking Communities), Croatia, Ireland, Sweden, the Netherlands, Greece, Poland, Romania, Latvia, Portugal, Denmark, Italy, Germany, Spain and Slovenia. Within this group, several distinct sub-patterns can be captured:

- *Two-agency splits*: In Italy (National Institute for Innovative Educational Practices (Indire) for practice/innovation, National Agency for Student Testing (Invalsi) for assessment) and Poland (Centre for Education Development (ORE) for support/CPD, Educational Research Institute - National Research Institute (IBE-PIB) for research) functions are divided between a "practice" agency and an "evidence" agency.

- *Federal or regionalised systems*: Germany (a joint Länder standards body, the Institute for Quality Development in Education (IQB), sits at the centre, but delivery runs through Bund-Länder programmes and 16 separate Länder approaches) and Spain (the national ministry holds legislative/strategic responsibility while the 17 Autonomous Communities hold executive and pedagogical responsibility).

- *Two-level structures*: Slovenia organises support nationally through specialised agencies (these are the National Education Institute of Slovenia (ZRSŠ), the Institute of the Republic of Slovenia for Vocational Education and Training (CPI), the Slovenian Institute for Adult Education (ACS), National Examination Centre (RIC)) and separately at the school level through school advisory services.

- *Thematic multi-centre structures*: Denmark runs three national knowledge centres (National Centre for Reading, National Centre for Learning Materials, National Centre for Mathematics Teaching) as consortia of university colleges rather than as government agencies.

- *Systems actively consolidating*: Latvia (State Education Development Agency (VIAA) absorbed two other agencies into a "one-stop-shop" from January 2025) and Portugal (the ongoing

(175) Part 3 of this staff working document draws upon a synthesis of an unpublished mapping of national advisory and support services in each of the 27 EU Member States (including the Flemish and French-speaking Communities of Belgium) conducted by the Commission's Network of independent national experts on education policy.

reorganisation, establishing the Institute for Education, Quality and Assessment (EduQA) alongside the Agency for the Management of the Education System (AGSE), consolidating functions previously spread across other bodies) are cases of organisations moving towards fewer, larger bodies.

Another pattern is the **inspectorate-led model**. France organises advisory and support functions primarily through its inspection bodies (General Inspectorate for Education, Sport and Research (IGÉSR), Academy Inspector - Regional Pedagogical Inspector (IA-IPR), departmental IEN) within a centralised, hierarchical administration, with no single dedicated support body. Austria shows a related but distinct feature: its inspectorates and pedagogical support services were formally merged into a mandatory quality-management system, so that former inspectors now function as quality managers.

The last identified organisational type is **centralised ministry-led model with/without dedicated agencies**. Luxembourg, Malta and Hungary concentrate authority in the ministry while running specific agencies underneath or alongside it: Luxembourg pairs an independent university research centre (Centre for Educational Testing at the University of Luxembourg (LUCET)) with an in-ministry operational bridge (SCRIPT), Malta relies on subject Education Officers inside ministry directorates, supplemented by the National Literacy Agency and the Institute for Education, Hungary channels most of these functions through the Educational Authority (OH) and the Klebelsberg Centre, following the closure of its former national research institute.

Typical divisions of labour

A consistent cross-country pattern emerges regarding the **typical divisions of labour** across the 27 EU Member States. **Monitoring/Quality Assurance (QA)** is generally the most institutionalised function, **guidance/Continuing Professional Development (CPD)** is usually anchored in a recognisable body, **school improvement support** is the function most often delivered on a project-by-project basis rather than through a stand-alone service and **research synthesis/knowledge brokerage** is the function most frequently reported as weak or entirely missing.

The **Monitoring/QA** function, run either by inspectorates (Croatia's NCEEE, France's school evaluation framework, Portugal's IGEC, Sweden's Skolinspektionen) or by dedicated assessment bodies (Invalsi in Italy, INEE in Spain, FINEEC in Finland, IQB/VERA in Germany, RIC in Slovenia). The **Guidance/CPD** function is usually anchored in an identifiable body, for example, in the education networks in Belgium, NPI in Czechia, Oide in Ireland, ORE in Poland, NIVaM and the EduHub network in Slovakia, ZRSŠ in Slovenia, the CEPs/CPRs/CRIE in Spain, and CFAE in Portugal. It is frequently paired with subject-specific institutes, such as Denmark's three national knowledge centres, Finland's Niilo Mäki Institute, and Germany's DZLM (which coordinates the ten-year QuaMath mathematics programme). **School improvement support** is the function most often delivered through time-limited programmes rather than a standing service: Croatia's Whole-day School pilot, Germany's Startchancen programme, Italy's NRRP mentoring initiative, Romania's protected remedial hours and MIAF framework, Cyprus's DRASE+, Ireland's Reading Recovery, Maths Recovery, First Steps and Ready Set Go Maths programmes, and the Netherlands' risk-triggered education coordinators all illustrate this pattern. Dedicated **research synthesis/knowledge brokerage** centres exist in Belgium FL (Leerpunt), the Netherlands (NKO, formerly NRO, together with the reading-specific Kennistafel Effectief Leesonderwijs), Denmark (the three thematic centres) and Luxembourg (LUCET).

Enablers

A clear **statutory basis** is the most common enabler, underpinning Czechia's Strategy 2030+, Austria's Bildungsdirektionen-Einrichtungsgesetz (BD-EG), Croatia's Act on the Agency for Education, Denmark's framework agreements, Estonia's Education Strategy 2021-2035, Finland's Government Programme commitments, Luxembourg's 2009 law on National educational standards, Malta's National Education Strategy 2024-2030, Slovenia's legislative framework, and Spain's Education Act.

Strong, granular **data infrastructure** is documented in Luxembourg (census-based ÉpStan assessments with public dashboards down to the student level), Estonia (the open Haridussilm portal), Denmark (the national monitoring framework and the "message book") and the Netherlands (a dense combination of cohort, examination and inspection data). In several other countries, including France, Croatia, Latvia, Poland and Portugal, data exists but is not yet systematically converted into targeted school-level support.

Large, multi-year committed funding is documented for Germany's Startchancen programme (€20 billion over ten years), Denmark's Quality programme (DKK 500 million annually) and Croatia's Whole-day School rollout (EU/NRRP-financed, plus a World Bank loan). In other countries, funding is described as fragmented or project-dependent.

In relation to **teacher education**, structural links are strongest where **support bodies are institutionally housed within teacher-education institutions**, such as Denmark's three national knowledge centres, which are run by university colleges, Austria's development counsellors who sit within the PH teacher-education colleges, Sweden's NCM which is based at the University of Gothenburg, and the Netherlands' numeracy centre which is led by Utrecht University's Freudenthal Institute.

Belgium's education networks, Latvia's and Lithuania's municipalities, the Netherlands' sector bodies (PO-Raad/VO-raad) and Portugal's AGSE all give **school-governing bodies** a direct hand in shaping or receiving support.

Outliers

Austria: merger of inspection into quality management. Austria is the only system across the 27 Member States to have fully merged its inspectorate and pedagogical support function into one legally mandated quality-management cycle, covering standardised assessment (IKMplus), communication of results, school programming, and internal/external evaluation, all in a single loop running through the regional directorates.

Luxembourg: LUCET/ÉpStan monitoring infrastructure. A university centre, fully independent of the Ministry in staffing, funding and policy, runs census-based, longitudinal, multi-domain cohort assessment (covering motivation and attitudes as well as achievement) with results published on public dashboards down to the student level. Among the 27 Member States, this is the most sophisticated evidence-generation infrastructure described.

Promising approaches

Latvia: PuMPuRS. An ESF-funded early-school-leaving prevention project (2017-2023 - €37.05 million: €31.49 million ESF plus €5.56 million national co-financing) that built a structured mechanism for identifying at-risk learners and mobilising individual academic, psychological, social and financial support around them. Over 63,000 students had received support by 2021, and independent evaluations found improvements in achievement, well-being, engagement and teacher relationships. Crucially, many of its practices were carried over into the broader support system once the project itself ended, which is what marks it out as promising, as it produced evidence and that evidence was acted on.

Germany, Startchancen. The largest education programme in Germany's history, it was launched at the start of the 2024/25 school year and will run for ten years. Under the scheme, the Federal and Länder governments will each provide up to €1 billion annually in additional funding (€20 billion total), targeting roughly 4,000 schools with high shares of socially disadvantaged pupils. The programme rests on three pillars: investment in learning environments, "opportunity budgets" to strengthen school autonomy and additional staff to strengthen the multi-professional team. What makes the programme promising is that scientific monitoring, evaluation and continuous adaptation are built into the programme's design from the outset, rather than added on afterwards or left undone.

Ireland: An example of a strong, mission-driven knowledge broker model is Ireland. Since its first Literacy and Numeracy Strategy in 2011, the government has pursued a sustained and targeted approach: national assessments track outcomes over time, and the 2024-2033 Literacy, Numeracy and Digital Literacy Strategy sets out clear prevention, intervention and compensation measures, complemented by the DEIS programme for schools serving disadvantaged communities.

The Netherlands: Its policy explicitly frames education as evidence-informed rather than evidence-based, in line with the advice of the **Onderwijsraad** (an independent advisory body to the government and the parliament) and drawing on a **broad knowledge infrastructure** organised through the **National Institute for Educational Knowledge (NKO).**

2. Policy frameworks and gaps

Policy frameworks

Across the 27 EU countries, **national approaches to evidence-informed practice in basic skills vary widely**, from countries with clearly stated national strategies to others where the ambition remains implicit or scattered across several unconnected policies. Two dimensions structure this synthesis: how directly national strategies address evidence-informed practice in basic skills, and the type of gaps that recur once that strategy meets classroom practice.

Dedicated strategies and broader frameworks Several countries have adopted clear, dedicated strategic documents addressing evidence-informed practice on basic skills directly. The Czech Republic's Strategy 2030+, Germany's Bildungsstandards, Estonia's Education Strategy 2021-2035, Ireland's 2024-2033 Literacy, Numeracy and Digital Literacy Strategy, and the Netherlands' explicit evidence-informed policy framework all name the ambition clearly at the national level. Hungary and Slovakia have recently adopted comparable strategies, respectively, a broad Public Education Strategy and the NPDE 2035, published in December 2025.

In a larger group of countries, the ambition is not carried by a single dedicated document. This takes two forms. In some, a national strategy exists but is broader in scope than school-level basic skills, so the challenge is specificity rather than fragmentation: Poland's Integrated Skills Strategy 2030 is a lifelong-learning framework, and Romania's Educated Romania 2030 remains a vision rather than an operational plan. In others, the ambition is distributed across several complementary policies and reforms: France (the Socle commun ([176]) plus the French Language and Mathematics Plans), Greece (curriculum reform, Skills Labs and digital initiatives), Belgium Flanders, Croatia, Portugal, Italy (which relies on project-based funding rather than a dedicated strategy), Luxembourg (whose sophisticated monitoring infrastructure is not matched by a practice-oriented framework), Spain (organised instead around national diagnostic evaluations), and Lithuania and Latvia (multiple overlapping documents).

Slovenia is the third variant of this pattern: the term evidence-informed education is rarely used in national sources, yet comparable functions are addressed under headings such as quality assurance.

Bulgaria and Cyprus sit between these groups, each building new structures without yet reaching a comprehensive strategy, Bulgaria through its reinstated Institute of Education (2024) and Cyprus through the TSI 2025-2027 project ‘Effective policy interventions to consolidate the acquisition of basic skills in Cyprus’. Denmark and Belgium Wallonia-Brussels illustrate a further variant: recent agreements or decrees (Denmark's 2021 and 2024 agreements, the Wallonia-Brussels steering plans and target contracts) give schools clearer expectations without an accompanying evaluation or research programme to test whether they work. Malta's National Education Strategy 2024-2030 is overarching rather than basic-skills specific, and its existing skill-specific strategies sit alongside it without one unifying framework.

Taken together, **the presence of an explicit strategy is not, on its own, a strong predictor of a well-functioning system**. What distinguishes stronger from weaker cases is less the existence of a formal strategy than whether it is paired with the capacity to monitor, evaluate and adjust it over time.

Typical gaps

A small number of gap types recur across nearly all twenty-eight cases (EU Member States, and the Flemish and French communities in the case of Belgium), independent of national wealth, governance model or the age of the system in place.

These include:

- **Weak "last mile" to schools and classrooms:** generating solid national data but struggle to convert it into classroom-level action.
- **Fragmented responsibilities:** research, guidance, evaluation and digital support housed in separate bodies with no single actor responsible for coherence.

([176]) Common Core of Knowledge, Skills and Culture.

- **Limited evaluation capacity:** reforms and support measures were found to be rarely evaluated systematically.
- **Weak feedback loops from practice to policy:** school level perceiving advisory visits as oversight rather than support, lacking a clear overview of the support available to them or struggling to define their support needs clearly enough for available provision to respond.
- **Uneven support for disadvantaged areas:** linked to regional and social disparities and to challenges around directing resources and teacher support towards disadvantaged schools and students.

Overall, the mapping suggests that basic skills support systems across the EU are more often held back by weak connective tissue, between data and action, between agencies, and between practice and policy, than by an outright absence of institutions, strategies or resources.

Concluding remarks for Part 3

Diversity of models, one dominant pattern. Four organisational types recur across the EU, ranging from a single national body concentrating most functions, to inspectorate-led and centralised ministry-led arrangements with/without dedicated agencies. The distributed model, in which functions are split across multiple bodies, is by far the most common, and temporary or project-based structures are layered onto almost every model rather than forming a distinct type of their own.

Uneven division of labour. Monitoring and quality assurance tend to be the most institutionalised functions, and guidance/CPD is usually anchored in a named body. School improvement support, by contrast, is more often delivered through time-limited programmes than through a standing service, and research synthesis or knowledge brokerage is the function most frequently reported as weak or absent altogether.

Enabling conditions are unevenly present. A clear statutory mandate, granular data infrastructure, sustained multi-year funding, and structural links to teacher education are the factors most consistently associated with stronger systems, but no country combines all of them, and several lack most of them.

A shared set of weaknesses. Regardless of national wealth, governance model or the age of the system, the same gaps recur: a weak connection between national data and classroom-level action, fragmented responsibilities with no single actor ensuring coherence, limited systematic evaluation of reforms, weak feedback loops between practice and policy, and uneven support for disadvantaged areas.

A strategy on paper is not enough. Countries with an explicit national strategy are not necessarily better placed than those without one. What differentiates stronger systems from weaker ones is less the existence of a formal strategy than whether it is matched by the capacity to monitor, evaluate and adjust over time.

Implications for EU cooperation. Because the recurring gaps concern connections, between data and action, between agencies, and between practice and policy, rather than an outright absence of institutions, strategies or resources, EU-level cooperation is likely to add most value by supporting this "connective tissue" (for instance through peer learning on knowledge brokerage and evaluation capacity), rather than by promoting any single organisational model for adoption across Member States.

EU Network of Advisory and Support Services

Through a new EU Network of Advisory and Support Services, presented as an action of the Education and Skills Package, the European Commission will support the development of strong national and regional services in the Member States; connect expertise, resources and practice across countries; and offer coherent, tailored and evidence-informed advice. The Network will seek to strengthen the coherence, relevance and reach of support and advice available to schools, and to enhance the capacity of such structures to link and amplify existing services, without favouring a single operating model.

Annex: Consultation inputs

Youth Check

On 12 June 2026, as part of the fourth meeting of the EU Youth Stakeholders Group, a Youth Check ([177]) consultation was implemented on the Education Package. The focus was on basic skills attainment, cross-border collaboration between schools, addressing challenges in the teaching profession, as well as boosting the rollout of high-quality digital education.

Participants highlighted that students' learning is being held back by inequality, poor well-being, underfunded schools, overcrowded classrooms, and the disruptive effects of digital technologies. Without targeted funding and inclusive frameworks, initiatives like the European Education Area risk deepening inequalities, leaving rural and marginalised students further behind.

They called for stronger EU support for basic skills, teacher training, inclusive and tailored support for learners, and better resources and infrastructure. A stronger European school experience should include more accessible and recognised mobility, online exchange, civic education, and closer cooperation across borders, led by school authorities and supported by civil society. Teachers were seen as central, needing recognition, trust-based relationships with students, better working conditions, and support to adapt to social media and AI. Looking to 2030, participants stressed that AI literacy should be embedded across education, with attention to ethics - ensuring that EU education reforms bridge gaps rather than widen them - creativity, data protection, and reducing administrative burdens so teachers can focus on human interaction.

Call for Evidence

The responses to the Call for Evidence (30 July – 8 September 2026) broadly support the objective of strengthening the acquisition of basic skills and point to the need for a more systemic approach. Contributions from public authorities, education professionals, civil society, researchers, social partners and businesses broadly converge on the importance of linking curriculum and pedagogy with early identification of learning difficulties, targeted support, teacher capacity, assessment and monitoring. At the same time, respondents emphasise that approaches should take account of differences between learners, schools and territories and avoid creating additional administrative burdens.

Early foundations and timely support

A number of respondents, including education authorities and teacher organisations, stress that action on basic skills should start early. High-quality early childhood education and care is seen as an important foundation for language, literacy, numeracy and other learning capacities. Respondents also highlight the importance of identifying learning difficulties at an early stage and providing timely, targeted support, rather than allowing gaps to become entrenched.

Several contributions underline that such support should be particularly responsive to learners facing socio-economic, linguistic, geographical or other barriers. Civil society organisations and local authorities point to the potential contribution of families, community organisations and other local actors in supporting children who may not be reached adequately through formal school structures alone.

Effective teaching and meaningful application of knowledge

Respondents place strong emphasis on the quality and effectiveness of teaching. They call for approaches that combine solid foundations in literacy, mathematics and science with opportunities for pupils to apply knowledge, reason, solve problems, investigate and work with others. Several contributions stress that basic skills should not be understood as learning isolated techniques, but as the ability to use knowledge and skills effectively in new and real-life situations.

([177]) EU Youth Stakeholders Group | European Youth Portal.

Some school and practitioner contributions advocate greater use of inquiry-based, experiential and interdisciplinary learning, including through practical activities, outdoor learning and links with vocational and professional contexts. Such approaches are presented as ways of making learning more meaningful while allowing pupils to practise several basic skills together. Respondents nevertheless also stress the importance of maintaining sufficient focus on the acquisition of solid knowledge and core competences.

A related message is the need for better use of evidence on what works. Several respondents call for promising approaches to be evaluated in different contexts and with different groups of learners before being scaled up. In this regard, European cooperation is seen as potentially useful for testing, evaluating, adapting and transferring effective practices rather than simply disseminating project outputs.

Assessment, early identification and monitoring

Respondents frequently highlight the importance of assessment and monitoring as tools for improving learning rather than primarily for accountability. They support the use of information on learners' progress to identify gaps and target additional support, while cautioning against excessive testing and reporting requirements.

Some contributions also call for monitoring approaches that combine quantitative indicators with contextual and qualitative information, including socio-economic background, participation, well-being and feedback from learners and teachers. This is seen as important for understanding differences in outcomes and for identifying the conditions under which particular approaches are effective.

Digital technologies and AI: opportunities with safeguards

Digital competence and media literacy feature prominently in the feedback and are increasingly presented as closely connected to basic skills. Respondents emphasise that digital competence should extend beyond the ability to operate devices and include information and media literacy, source criticism, critical thinking, data literacy and the ability to assess the reliability of information.

The feedback on AI is broadly supportive of its potential to support teaching and learning, including personalisation, accessibility and feedback, but contains significant caution regarding its possible effects on foundational learning. Several respondents argue that technology should support rather than replace the cognitive work through which pupils develop reading, writing, mathematical reasoning, scientific thinking and problem-solving. One contribution explicitly distinguishes between AI-supported learning, where AI scaffolds the learner's own work, and AI-substituted learning, where AI performs the competence that the learner is expected to develop.

Respondents consequently call for AI literacy to include an understanding of the opportunities and limitations of AI, critical verification of its outputs and judgement about when its use is pedagogically appropriate. Some also stress the continued importance of analogue learning, independent thinking and unaided performance where these are themselves the intended learning outcomes.

Teachers as a key condition for improving basic skills

The teaching profession is repeatedly identified as a critical condition for improving basic skills outcomes. Contributions from teacher organisations, public authorities and practitioners link teacher shortages, workload and working conditions to the capacity of schools to provide high-quality and personalised learning. The feedback therefore generally supports addressing both **recruitment and retention**, alongside professional development, mentoring, career opportunities and professional autonomy.

Respondents also stress that professional development should be continuous, practical and connected to classroom practice. Particular needs identified include effective approaches to literacy, mathematics and science, inclusive education, assessment, digital and media literacy and the responsible use of AI. Several contributions call for stronger professional learning communities, peer learning and links between research and practice.

In this context, the feedback points to a close relationship between the basic-skills and teaching-profession strands: **without sufficient numbers of well-prepared and supported teachers, the capacity of education systems to address basic skills gaps is constrained.** The consultation also suggests that reducing unnecessary administrative tasks and ensuring teachers have sufficient time for preparation, collaboration and professional learning could strengthen this capacity.

Equity, cooperation and implementation

Across stakeholder groups, respondents emphasise that improving average attainment will not be sufficient if substantial groups of learners continue to fall behind. Targeted approaches for disadvantaged learners and schools, adapted to local circumstances, are therefore frequently advocated. Local and regional authorities in particular stress their role in identifying needs, coordinating support and translating European priorities into practice.

Respondents also highlight the potential contribution of cooperation between schools, families, local authorities, VET providers, businesses, universities and civil society. Such partnerships are seen as providing additional expertise and resources and, in some cases, creating more authentic contexts in which learners can apply basic skills.

Overall, the feedback suggests a broad stakeholder expectation that action on basic skills should combine **strong foundations and effective teaching; early identification and targeted support; better use of assessment and evidence; sufficient teacher capacity; and a careful, pedagogically driven approach to digital technologies and AI**. A recurrent message is that European cooperation can add value by strengthening evidence, facilitating mutual learning and supporting the transfer of effective approaches, while implementation needs to remain responsive to national, regional and school contexts.

Bibliography for Part 2

Agyapong, B., Obuobi-Donkor, G., Burback, L. and Wei, Y. (2023), "Burnout and associated psychological issues among teachers: A scoping review", *European Psychiatry*, 66(S1), S948–S949.

Agius, J. (2024), "Inclusive education for all: A qualitative exploration of fostering social justice and supporting students with special educational needs in the learning environment", *MCAST Journal of Applied Research & Practice*, 7(3), 20–39.

Aktan, O. (2020), "Determination of educational needs of teachers regarding the education of inclusive students with learning disability", *International Journal of Contemporary Educational Research*, 7(1), 149–164.

Alieva, A. (2021), *Parental Involvement in Formal Education*, NESET ad-hoc report, European Commission.

Armstrong, A. C., Spandagou, I., & Armstrong, D. (2009). Inclusive education: International policy & practice. SAGE, London

Batu, E. S., Odluyurt, S., Alagözoğlu, E., Cattlk, M. and Şahin, Ş. (2017), "Determining the opinions of preschool teachers regarding inclusion", *Journal of Special Education*, 18(3), 401–420.

Bohnenkamp, J. H., Patel, C., Connors, E., Orenstein, S., Ereshefsky, S., Lever, N., & Hoover, S. (2023). Evaluating strategies to promote effective, multidisciplinary team collaboration in school mental health. *Journal of Applied School Psychology*, 39(2), 130-150. https://doi.org/10.1080/15377903.2022.2077875

Carless, D. (2012), *From Testing to Productive Student Learning: Implementing Formative Assessment in Confucian-Heritage Settings*, Routledge.

Cedefop (2022), *Professional Development for VET Teachers and Trainers: Thematic Perspectives – Inclusion and Digitalisation*, Publications Office of the European Union, Luxembourg.

Cefai, C., Simões, C. and Caravita, S. C. S. (2021), *A Systemic, Whole-School Approach to Mental Health and Well-Being in Schools in the EU*, NESET analytical report.

Council of the European Union (2022), *Council Recommendation of 28 November 2022 on Pathways to School Success and Replacing the Council Recommendation of 28 June 2011 on Policies to Reduce Early School Leaving*, 2022/C 469/01, OJ C 469, 9.12.2022, p. 1, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022H1209(01).

Council of the European Union (2026), *Council Conclusions on Teachers in the Era of Artificial Intelligence (AI)*, 9003/26, https://data.consilium.europa.eu/doc/document/ST-9003-2026-INIT/en/pdf.

Crêteur, S. (2026). *Large language models in school education: emerging evidence*. ENESET report. Publications Office of the European Union. https://doi.org/10.2766/7329817

Crêteur, S., Dunajeva, J., Frydman, B., Berg Mulvik, I., Del Cogliano, D., Nada, C., Siarova, H. and Sankalaite, S. (2026), *Mobile Phone Bans in Schools across the EU*, ENESET report, Publications Office of the European Union, Luxembourg, https://doi.org/10.2766/2403181.

Crispel, O., & Kasperski, R. (2021). The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education*, 25(9), 1079-1090. https://doi.org/10.1080/13603116.2019.1600590

Donnelly, V. and Kyriazopoulou, M. (2014), *Organisation of Provision to Support Inclusive Education: Summary Report*, European Agency for Special Needs and Inclusive Education.

Dunajeva, J., Lőrincz, B., & Siarova, H. (2026). Concept paper: The evolution of policy approaches to educational inequality in Hungary and Lithuania. *Equity in Education & Society*, *5*(1), 73-90. https://doi.org/10.1177/27526461241256967

Education, Audiovisual and Culture Executive Agency (EACEA) (2023), *Promoting Diversity and Inclusion in Schools in Europe*, Eurydice report, Publications Office of the European Union, Luxembourg.

Eurochild (2025), *Child Participation in Europe Sub-Report*, in *Children's Realities in Europe: Progress & Gaps – Eurochild 2024 Flagship Report on Children in Need across Europe*, https://eurochild.org/resource/child-participation-in-europe/.

European Agency for Special Needs and Inclusive Education (EASNIE) (2022), *Legislative Definitions around Learners' Needs: A Snapshot of European Country Approaches*, eds. M. Turner-Cmuchal and A. Lecheval, European Agency for Special Needs and Inclusive Education, Odense.

European Agency for Special Needs and Inclusive Education (EASNIE) (2023a), *Special Education Needs? Working towards More Flexible Systems of Support to Meet All Learners' Needs*, European Agency for Special Needs and Inclusive Education.

European Agency for Special Needs and Inclusive Education (EASNIE) (2023b), *Voices into Action: Including the Voices of Learners and Their Families in Educational Decision-Making – Final Summary Report*, eds. A. Kefallinou and D. Murdoch, European Agency for Special Needs and Inclusive Education, Odense.

European Agency for Special Needs and Inclusive Education (EASNIE) (2025), *Multi-Level, Multi-Stakeholder Frameworks for Quality Assurance, Monitoring and Accountability: Guidelines for Use*, eds. D. Murdoch and R. Svarinskaite, European Agency for Special Needs and Inclusive Education, Odense.

European Agency for Special Needs and Inclusive Education (EASNIE) (2026a), *Ten Pillars Shaping the Future of Inclusive Education: Background Paper*, eds. A. Kefallinou, V. Donnelly, A. Mangiaracina, G. Hughes and E. Rebollo Píriz, European Agency for Special Needs and Inclusive Education, Odense.

European Agency for Special Needs and Inclusive Education (EASNIE) (2026b), *Learner Participation in Inclusive Education: Handbook for Teachers/Educators and School Leaders*, European Agency for Special Needs and Inclusive Education, https://www.european-agency.org/resources/publications/lpie-handbook.

European Commission (2022), *Pathways to School Success: Commission Staff Working Document Accompanying the Proposal for a Council Recommendation on Pathways to School Success*, Publications Office of the European Union, Luxembourg.

European Commission (2024), *Well-being and Mental Health at School – Guidelines for Education Policymakers, School Leaders, Teachers and Educators*, Directorate-General for Education, Youth, Sport and Culture, Publications Office of the European Union, https://doi.org/10.2766/590.

European Commission (2025), *Working Group on Schools, Pathways to School Success: Engaging Parents and Learners as Key Actors in Education – Building Meaningful Partnerships for School Success*, Peer Learning Activity Report, European Commission.

Fegert, J. M. and Melchior, M. (2026), *Child Safety Online: Protecting and Empowering Minors in a Digital World – Report by the Co-Chairs of the Special Panel on Child Safety Online*, European Commission.

Finnish Education Evaluation Centre (2022), *Children's Participation in Planning and Evaluating ECEC*, Finnish Education Evaluation Centre, https://www.karvi.fi/sites/default/files/sites/default/files/documents/KARVI_T1322.pdf.

Gillon, G., McNeill, B., Scott, A., Gath, M., Macfarlane, A. and Taleni, T. (2024), "Large scale implementation of effective early literacy instruction", *Frontiers in Education*, 9, https://doi.org/10.3389/feduc.2024.1354182.

Guellai, B., Somogyi, E., Esseily, R. and Chopin, A. (2022), "Effects of screen exposure on young children's cognitive development: A review", *Frontiers in Psychology*, 13, https://doi.org/10.3389/fpsyg.2022.923370.

Hopkins, D., Harris, A., Stringfield, S. and Stoll, L. (2014), "School and system improvement: A narrative state-of-the-art review", *School Effectiveness and School Improvement*, 25(2), 257–281.

Hulpia, H., Sharmahd, N., Bergeron-Morin, L., De Pré, L., Crêteur, S. and Dunajeva, J. (2024), Quality in Early Childhood Education and Care (ECEC): State of Play in the EU Member States Based on the European Quality Framework, NESET report, Publications Office of the European Union, Luxembourg, https://doi.org/10.2766/932337

Imaniah, I. and Fitria, N. (2018), "Inclusive education for students with disability", *SHS Web of Conferences*, 42, Global Conference on Teaching, Assessment, and Learning in Education.

International Association for the Evaluation of Educational Achievement (IEA) (2023), *International Computer and Information Literacy Study (ICILS) 2023*, IEA.

Jamtsho, S. (2015), *Implementing a Whole-School Approach to Student Well-being: A Study Examining the Implementation Experiences of Bhutanese and Australian Teachers in Well-being Leadership Roles*, Melbourne Graduate School of Education, University of Melbourne.

Kauffman, J. M., & Badar, J. (2014). Instruction, not inclusion, should be the central issue in special education: An alternative view from the USA. *Journal of the International Special Needs Education*, *17*(1), 13-20. *https://doi.org/10.9782/2159-4341-17*.1.13

Kolupaieva, I. and Tiesheva, L. (2023), "Asymmetry and convergence in the development of digital technologies in the EU countries", *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 18(3), 687–716.

Lee, J., Shapiro, V. B. and Kim, B. E. (2023), "Universal school-based social and emotional learning (SEL) for diverse student subgroups: Implications for enhancing equity through SEL", *Prevention Science*, 24, 1011–1022.

Lundy, L. (2007), '"Voice" is not enough: conceptualising Article 12 of the United Nations Convention on the Rights of the Child', *British Educational Research Journal*, Vol. 33, No 6, pp. 927–942

Mac Ruairc, G., Ottesen, E. and Precey, R. (2013), *Leadership for Inclusive Education: Values, Vision and Voices*, Vol. 18, Springer.

Mangiaracina, A. (2016), *Financing of Inclusive Education: Background Information Report*, European Agency for Special Needs and Inclusive Education.

Moyse, R., & Porter, J. (2015). The experience of the hidden curriculum for autistic girls at mainstream primary schools. *European Journal of Special Needs Education*, 30(2), 187-201. https://doi.org/10.1080/08856257.2014.986915

Murphy, C. (2024), *Cyberbullying among Young People: Laws and Policies in Selected Member States*, European Parliamentary Research Service.

National Council for Special Education (NCSE) (2024), *An Inclusive Education for an Inclusive Society: Policy Advice Paper on Special Schools and Classes*, National Council for Special Education.

OECD (2015), Education Policy Outlook 2015: Making Reforms Happen, OECD Publishing, Paris. The DOI from my notes is https://doi.org/10.1787/9789264225442-en

OECD (2021), *Promoting Inclusive Education for Diverse Societies: A Conceptual Framework*, OECD Education Working Papers, No. 260, OECD Publishing.

OECD (2023), *Equity and Inclusion in Education: Finding Strength through Diversity*, OECD Publishing, Paris, https://doi.org/10.1787/e9072e21-en.

OECD (2025), *Results from TALIS 2024: The State of Teaching*, OECD Publishing, Paris, https://doi.org/10.1787/90df6235-en.

OECD (2026), *Every Day Counts: Understanding, Preventing and Responding to School Attendance Problems*, OECD Publishing, Paris.

Óskarsdóttir, E., Donnelly, V., Turner-Cmuchal, M. and Florian, L. (2020), "Inclusive school leaders – Their role in raising the achievement of all learners", *Journal of Educational Administration*, 58(5), 521–537.

Pak, K. and Parsons, A. (2020), "Equity gaps for students with disabilities", *Penn GSE Perspectives on Urban Education*, 17.

Paseka, A., Villiger, C., Addi-Raccah, A., Dusi, P., Kruska, J., Leenders, H. and de Jong, J. D. (2025), "Relationship between school and parents: A comparative analysis of the legislative framework in five different countries", *European Educational Research Journal*, 14749041251338649.

Priestley, M., Thomas, L., Rushton, E. and Smith, J. (forthcoming), *Exploring the Relationships between Curriculum Design and Achievement in Basic Skills*, ENESET report, Publications Office of the European Union, Luxembourg.

Reschly, A. L. and Christenson, S. L. (eds.) (2022), *Handbook of Research on Student Engagement*, Springer International Publishing, Cham.

Rooney, L. E., Videto, D. M. and Birch, D. A. (2015), "Using the Whole School, Whole Community, Whole Child model: Implications for practice", *Journal of School Health*, 85(11), 817–823.

Sankalaite, S., Nada, C., and Crêteur, S. (forthcoming), 'Effects of Digital Distractions on Learning Outcomes', ENESET report, Luxembourg: Publications Office of the European Union. doi: 10.2766/0629241

Schuelka, M. J. (2018), *Implementing Inclusive Education*, UK Department for International Development.

Siarova, H. (2022). *Education interventions supporting newly arrived migrant and displaced children in their language learning needs* (NESET ad hoc report no. 2/2022). European Commission. https://education-socioeconomic-experts.ec.europa.eu/publications/ad-hoc-reports-and-other-publications/education-interventions-supporting-newly-arrived-migrant-and-displaced-children-their-language_en

Simon, P., & Piché, V. (2012). Accounting for ethnic and racial diversity: the challenge of enumeration. *Ethnic and Racial Studies*, 35(8), 1357-1365. https://doi.org/10.1080/01419870.2011.634508

Smeets, E. and Roeleveld, J. (2016), "The identification by teachers of special educational needs in primary school pupils and factors associated with referral to special education", *European Journal of Special Needs Education*, 31(4), 423–439.

Smyth, E., Moya, A. and Darmody, M. (2026), *The long-term outcomes of school absence*, ESRI Research Series No 220, Economic and Social Research Institute, Dublin, https://doi.org/10.26504/rs220.

Theis, D., Thomsen, M., Vogel, C., & Wasserfuhr, V. (2026). *The impact of intelligent tutoring systems in general education*. ENESET report. Publications Office of the European Union. https://doi.org/10.2766/0766181

Tilbury, D. (2026). *Impact of AI on children's socio-emotional and cognitive competences*. ENESET report. Publications Office of the European Union. https://doi.org/10.2766/3470339

UNESCO (2016), *Reaching Out to All Learners: A Resource Pack for Supporting Inclusive Education*, UNESCO, Paris.

UNESCO (2020), *Global Education Monitoring Report 2020: Inclusion and Education – All Means All*, UNESCO, Paris.

UNESCO (2024), *Investing in Early Childhood Care and Education Yields Lifelong Benefits*, UNESCO.

Vandekerckhove, A., Hulpia, H., Huttova, J., Peeters, J., Dumitru, D., Ivan, C., Rezmuves, S., Volen, E. and Makarevičienė, A. (2019), *The Role and Place of ECEC in Integrated Working, Benefitting Vulnerable Groups Such as Roma*, NESET report, Publications Office of the European Union, Luxembourg, https://doi.org/10.2766/041535.

Vlcek, S. and Somerton, M. (2023), "Collaborative engagement between stakeholders in the education of Australian students with disability: A scoping review", *International Journal of Inclusive Education*, 1–18.