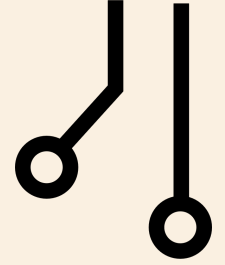




WINDEE



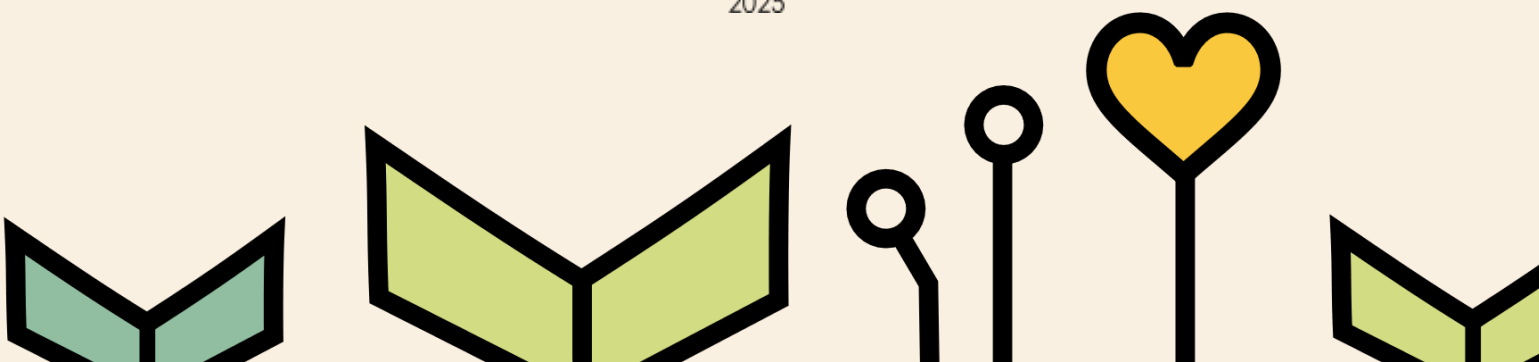
Digital Well-being in Education: Policy Mapping

D2.3 Policy Mapping Report

Kadri Mettis, Katrin Männik, Janika Leoste, Sirly Väärt

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➤ Authors

Kadri Mettis

Katrin Männik

Janika Leoste

Sirly Väät

➤ Contributors

Eirini Symeonidou, EUN

Airina Volungevičienė, VMU

Ilona Tandzegolskienė-Bielaglovė, EDEN

Diana Naujalė, NAE

Marie Nõgisto, Educraftor

➤ Layout

Tina Cajnkar, Knowledge Innovation Centre

➤ Partners



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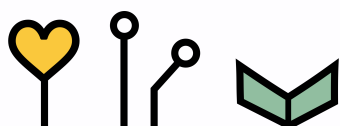
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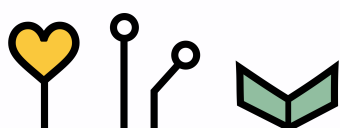


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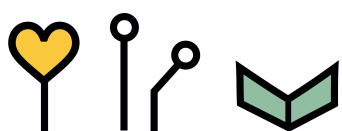


Introduction

Digital technology is now integral to every aspect of education, presenting new opportunities and challenges for student well-being. In education, digital well-being refers to the holistic state of learners' and teachers' physical, mental and social health in technology-rich learning environments. The Council of the European Union (EU) defines 'well-being in digital education' as a state of physical, cognitive, social and emotional contentment which fosters positive engagement in digital learning, online safety and empowerment in digital environments (Council of the European Union, 2022). This concept has gained prominence as schools across Europe have started to integrate digital tools and online platforms into their educational processes. While digitalisation offers opportunities such as flexible and open learning, technology - enhanced learning and teaching, blended and individualised learning, personalised learning, increased accessibility and innovative teaching methods, it also raises concerns regarding purposeful and competent application of technologies in education. The overuse, abuse and ill-use of technologies result in excessive screen time, cyberbullying, data privacy, mental health and digital inclusion. It is crucial that education policies address these challenges and suggest guidance to teachers and students in order to foster a safe and supportive digital learning ecosystem.

This current report provides an analytical overview of existing European and national-level policies related to digital well-being in education. It focuses on a selection of countries: Spain, Lithuania, Estonia, Finland and Malta, which are involved in a project called WINDEE (Well-being in Digital Education Ecosystem). Key policies and regulatory approaches are mapped, best policy practices and gaps highlighted, also recommendations for future policy development are offered. In doing so, we also link our findings to insights from the wider literature on digital education and well-being. The report is intended for policymakers and educators who wish to understand the current policy landscape and how it can be improved to support the well-being of students and teachers in an increasingly digital educational context.

In order to map digital well-being policies across Spain, Lithuania, Estonia, Finland and Malta, we first gathered country-specific desk research reports prepared by WINDEE project partners in each country. The desk research reports were investigating best practices, obstacles and successful policy implementations across the countries. We then contextualised these documents through a desk review of key EU-level frameworks, including the Digital Education Action Plan (2021-2027), the Better Internet for Kids (BIK+) Strategy and the 2022 Council Conclusions on Supporting Well-Being in Digital Education, to establish common definitions and benchmarks for digital well-being. Using a standardised WINDEE template, we systematically extracted information on policy objectives, regulatory approaches (e.g.



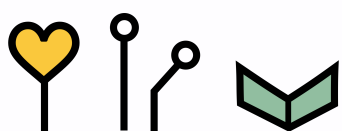
device-use rules and data-protection mandates), implementation mechanisms (e.g., governance bodies, funding streams and stakeholder roles) and support structures (e.g., teacher training, mental health programmes and Safer Internet Centres). This data was thematically coded across four dimensions (Governance, Curriculum & Pedagogy, Student Support & Inclusion, and Technology Oversight) and subjected to a comparative analysis that highlighted best practices, gaps, and innovations. Wherever possible, our findings were triangulated with secondary literature and EU benchmarking reports to validate insights. The resulting synthesis informed a set of evidence-based recommendations tailored to address the common challenges and leverage the shared opportunities identified across these five European countries contexts.

The authors confirm all major contributions, like study design, data collection and preparation, analysis, and writing, were made by humans. ChatGPT assisted with data analysis and text organisation only. No conclusions or decisions were delegated to AI. The authors independently reviewed and approved all work, adhering to ethical guidelines for the responsible use of AI in academic research.

1. European Policy Context

At the European level, the Council Conclusions on Supporting Well-being in Digital Education (2022) urge Member States and the European Commission (EC) to incorporate well-being into their digital education strategies and initiatives. The Council emphasises three key enablers for learners and teachers: (1) acquiring the knowledge, skills and competences required to foster well-being in digital education and training; (2) designing teaching and learning approaches and digital environments that enhance learners' well-being; and (3) fostering positive interpersonal relations within the digital education ecosystem. These conclusions signal a shift in focus from addressing risks to empowering schools to use technology to enhance digital well-being.

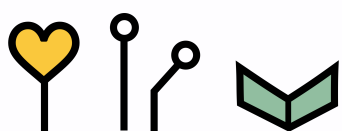
The Digital Education Action Plan (2021–2027) provides a framework for the digital transformation of education across the EU (European Commission, 2025). It emphasises the importance of developing high-quality digital competencies, investing in infrastructure and promoting safe and inclusive online teaching/learning. Although it is not an explicit “well-being” policy, the Action Plan addresses issues such as connectivity gaps, digital skills and online safety, which are fundamental to digital well-being. The Action Plan is aligned with broader strategies, such as the targets of Europe's “Digital Decade” (e.g., achieving universal connectivity and ensuring that all Europeans have basic digital skills by 2030), and serves as a reference point for national reforms (European Commission, n.d.).



The EU Declaration on Digital Rights and Principles (2022) emphasises that digital educational environments should be equitable, safe, empowering and inclusive. It aligns well with the aforementioned frameworks, such as the Council Conclusions on Well-Being in Digital Education and the Digital Education Action Plan, and complements them with broader, rights-based principles. Although it does not provide operational guidance, it establishes normative expectations for schools, platforms and policymakers to prioritise the well-being of learners and educators in the design of digital educational environments. More generally, the EU's General Data Protection Regulation (GDPR) imposes strict requirements on how student data is collected and used. The aim is to protect privacy, which indirectly supports well-being by safeguarding students' rights (GDPR.eu, n.d.). All European countries have adopted GDPR provisions with specific clauses for education.

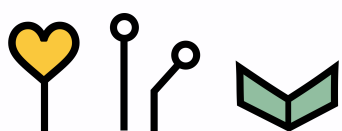
There are previous and ongoing policy interventions, which could be highlighted:

- [The Better Internet for Kids strategy \(updated as BIK+, 2022\)](#) seeks to create a safe digital environment for children throughout the EU member countries (European Commission, 2022). Every EU member hosts a Safer Internet Centre that conducts awareness programmes, runs helplines, and fights harmful or illegal online content. These efforts contribute to digital well-being by addressing cyberbullying, online child protection, and digital literacy.
- [The Insafe/INHOPE network of Safer Internet Centres](#) facilitates exchange of best practices and provides resources to educators and youth nationally and across borders (European Commission, n.d.).
- Initiatives for digital literacy and citizenship education are promoted via European frameworks like [DigiCompEdu](#) (for educators' digital competence) (Punie & Redecker, 2017) and [DigComp 2.2](#) (for citizens' digital skills) (Vuorikari, Kluzer, & Punie, 2022), which include aspects of responsible and safe technology use.
- [The GreenComp](#) as a framework for competence building about sustainability is worth mentioning, highlighting digital well-being through sustainable digital practices such as green tech use, ethical AI, and responsible digital citizenship (Bianchi, Pisiotis, & Cabrera Giraldez, 2022).
- [Erasmus+ Call for Policy Experimentation](#) has offered funding for projects linking high-quality digital education and learners' well-being (European Commission, 2024). It encourages piloting guidelines, teacher capacity-building and inclusive practices.
- [European Digital Education Hub](#) promotes a holistic approach to well-being by balancing (European Commission, 2025):
 - Adaptive interventions (e.g., time management, anti-bullying)
 - Systemic reforms (e.g., infrastructure equity, pedagogical design)



European-level research further strengthens policy efforts. In 2025, European Schoolnet launched a study on well-being in the digital environment in schools, aiming to develop a conceptual framework and gather evidence from 20 European education systems (European Schoolnet, 2023). Early findings show that many countries incorporate aspects of digital well-being, such as media literacy and cyber safety, into broader strategies, but dedicated, comprehensive well-being policies are only just beginning to emerge. The study also highlights that well-being in digital education is multidimensional, encompassing inclusion (closing the digital divide), health (managing screen time and stress), safety (security and preventing cyberbullying), and empowerment (building resilience and confidence online). The EU context provides the backdrop for the national policies discussed below, which are influenced by European directives and local priorities. The report emphasises that, although digital well-being is gaining recognition, its implementation remains fragmented across Europe. There is an urgent need for policy coherence, teacher training and learner involvement to ensure that the digital transformation of schools supports mental, social and emotional health. The following recommendations for further policy measures are presented: 1) develop national or school-level digital well-being policies; 2) embed digital well-being in curricula and assessment frameworks; 3) train teachers to identify signs of digital fatigue, stress or unsafe online behaviour; 4) encourage student participation in designing healthy digital environments; 5) expand the use of tools such as SELFIE for Teachers, adapted for well-being metrics.

As background, the selected countries show some variety in access to high-speed internet and overall digital skills. Malta has the highest internet access at 100%, followed by Spain (95%) in 2024. Finland (81.7%), Lithuania (78.3%) and Estonia (76.3%) perform around the EU average. From the perspective of digital skills (the proportion of people with basic or higher digital skills) Finland (82.0%) remains in first place, with Spain (66.2%), Malta (63.0%) and Estonia (62.6%) following, then Lithuania in 2023 (53.0% below the EU average). See also Figures 1 and 2.



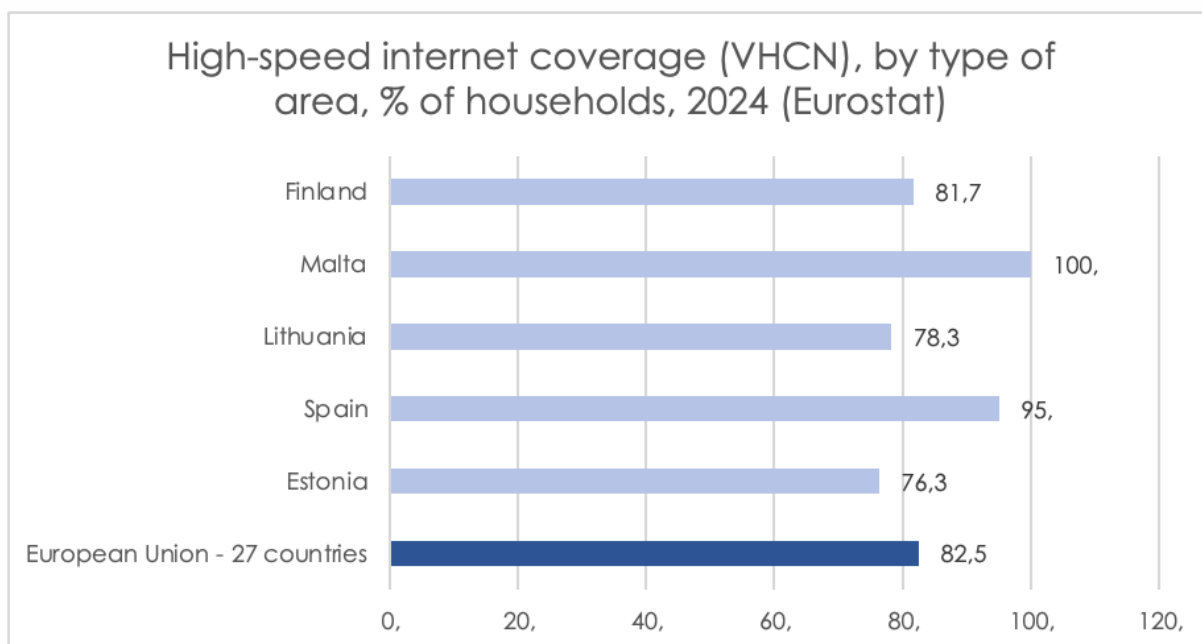


Figure 1. High-speed internet coverage, by type of area, % of households, 2024 (Eurostat)

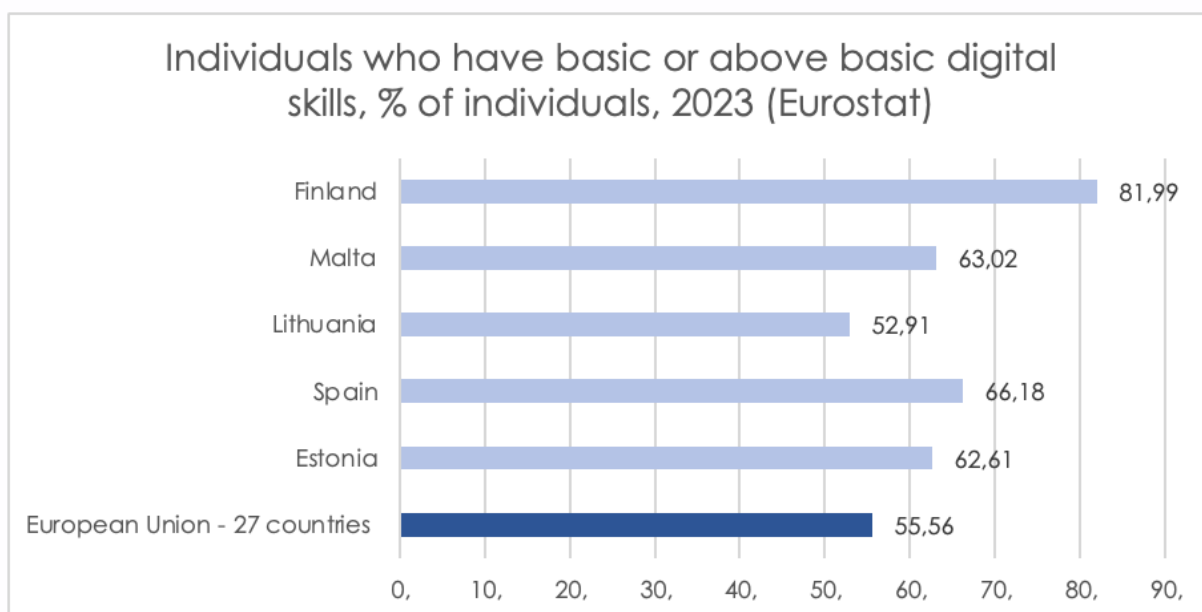


Figure 2. Individuals who have basic or above basic digital skills, % of individuals (Eurostat)

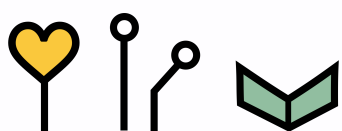
2. Policy and Regulatory Landscape

2.1 Spain

Spain's approach to digital well-being in education is embedded in its broader digital education and competency frameworks. The cornerstone of this approach is the Plan de Educación Digital (Digital Education Plan) which materialises in Plan#DigEdu. aims to modernise the country's education system by facilitating a comprehensive digital transformation. Key objectives include bridging the digital divide by improving schools' access to technology and infrastructure and enhancing the digital skills of students and teachers through training and certification programmes. In practice, the Plan de Educación Digital has driven investments in equipping classrooms with interactive digital systems and portable devices, as well as upskilling educators in line with Spain's digital competence frameworks.

Spain has developed specific frameworks to guide digital competence. The Marco de Referencia de la Competencia Digital Docente (MRCDD), approved in 2022, is a Digital Teaching Competence Reference Framework for teachers aligned with the European DigCompEdu standard (Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado, 2022b). Defining six areas of teacher competence (professional engagement, digital resources, teaching and learning, assessment, empowering learners, and facilitating students' digital competence) it serves as an official guide for teacher professional development in digital pedagogy. Similarly, Spain has introduced a Digital Competence Framework for Students (Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado, 2022) to ensure that students acquire digital skills from early childhood through to secondary education. This student framework emphasises not just technical skills, but also the 'critical, safe, ethical and sustainable use of technology', which is structured into five competence areas. Notably, Catalonia has its own policy (XTEC, 2022) that explicitly aims to develop habits of safe, healthy and responsible technology use, effectively incorporating digital well-being into regional curriculum standards.

The General Law of Audiovisual Communication (2022) and other child protection legislation address issues such as exposure to harmful content and online privacy; however, these are not education-specific. Spain does not have a dedicated "digital well-being law"; instead, aspects of well-being are scattered across different policies, such as data protection in

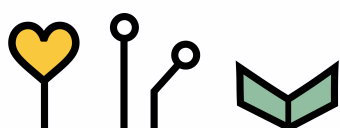


privacy laws, safe internet use in education plans, and general student welfare in education quality laws. A recent development at the European level with which Spain aligns is the EU Declaration on Digital Rights and Principles (2022), which Spain has supported. This declaration includes commitments to digital education and skills, connectivity for all, and the protection of children's rights online, all of which are relevant to well-being.

2.2 Estonia

Estonia is often cited as a digital frontrunner in Europe, renowned for its e-governance and high level of digital literacy. However, as seen above from the statistics, digital infrastructure conditions such as high-speed internet access is lower than in other observable countries. The broad vision guiding the country's development is encapsulated in 'Estonia 2035', a strategy setting out long-term action lines (European Commission, 2022). One of the key objectives of Estonia 2035 is to align the knowledge, skills and attitudes of the population with the demands of the labour market and structural changes in the economy, explicitly including the skills required for the green and digital transitions. Education plays a significant role in this, with the strategy supporting the development of vocational and higher education programmes (e.g., the Academy of e-Engineering), as well as coding and technology initiatives such as ProgeTiiger (Tiger Leap for programming in schools) and the IT Academy, which focuses on enhancing the digital skills of adults. While Estonia 2035 addresses well-being from a general socio-economic perspective, ensuring that people can thrive in a changing economy, it does not explicitly address "digital well-being". However, it establishes that digital competence is a national priority, which indirectly paves the way for a focus on healthy digital engagement.

The Estonian Education Strategy 2021–2035 serves as a blueprint for the education system, encompassing all levels, including adult learning (Ministry of Education and Research, Republic of Estonia, 2021). The strategy aims to equip individuals with the skills and attitudes necessary for lifelong learning and personal development. While this strategy does not directly reference 'digital well-being', it emphasises the integration of digital tools and facilities to ensure diverse and effective learning environments. Crucially, it acknowledges that digital tools should enhance educational outcomes while safeguarding students' mental health and personal development. Indeed, one of the strategy's three pillars is that 'Estonia has competent and motivated teachers and heads of schools, a diverse learning environment, and a learner-centred approach', a goal reflected in metrics such as the subjective well-being of students and teachers. Therefore, student and teacher well-being (though not exclusively digital) is a key measure of educational quality. Similarly, to the previous strategy (Lifelong Learning Strategy 2020), this strategy does not mention 'digital well-being', but

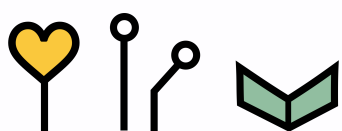


supports a comprehensive approach to digital skills and infrastructure, implicitly aiming for a balanced and healthy digital learning ecosystem.

Estonia's approach to digital transformation is outlined in its Research, Development, Innovation and Entrepreneurship (RDIE) Strategy 2021–2035 (Ministries of Education and Research and of Economic Affairs and Communications, 2021). Although this is an economic and innovation policy, its focus on digital transition across all sectors indirectly supports initiatives that promote digital well-being in education. For instance, the RDIE priority of 'digital solutions across all areas of life' encourages the integration of digital technology in education to enhance societal well-being and productivity. It also emphasises the importance of a secure cyberspace to foster trust in digital solutions, which is consistent with promoting the safe educational use of technology.

One highly relevant policy for citizen-centric digital transformation is the Estonian Digital Society 2030 strategy (Ministry of Economic Affairs and Communications, Republic of Estonia, 2021). This strategy explicitly mentions ensuring the digital well-being of citizens. It envisages a human-centric digital government in which digital solutions are a means of enhancing people's well-being rather than an end in themselves. Trust in the digital government can be fostered by developing reliable, ethical and lawful solutions that guarantee fundamental rights and freedoms online. Key principles include inclusive design and accessibility in both physical and digital spaces, so that everyone can benefit. In the context of education, Digital Society 2030 highlights topics related to well-being, such as expanding reskilling/upskilling initiatives, integrating digital competence development at all educational levels, promoting cybersecurity and safe digital environments, addressing digital access disparities (e.g., rural connectivity) and improving infrastructure while ensuring security. All of these factors contribute to creating a safer and more inclusive digital learning environment. The idea that 'it is safe to use digital spaces and there is no need to fear misinformation, cyberbullying or cybercrime' and that people will behave in ways that do not create digital risks (with background protections in place) is an ideal that directly relates to students feeling secure online.

In terms of specific educational technology policy, the EdTech Estonia Strategy 2023–2027 focuses on fostering innovation, supporting start-ups and expanding the EdTech ecosystem. While it does not explicitly address digital well-being, its encouragement of the thoughtful integration of technology in education implies that this will have a positive impact on learners. The strategy's emphasis on innovation suggests that it is considering how new technologies (such as AI, AR/VR, etc.) could enhance learning. However, this also means that policymakers need to consider the potential negative impact of technology on students' mental and emotional health, even if this is not explicitly stated, a point raised in internal analyses (that EdTech discussions should include well-being considerations).



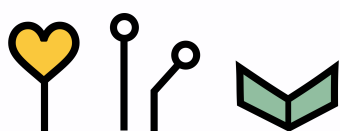
The Youth Sector Development Plan 2021–2035 complements educational policies by emphasising 'smart youth work', whereby digital tools are used innovatively to support holistic youth development (Ministry of Education and Research, Republic of Estonia, 2021). The plan focuses on improving accessibility to digital spaces for young people and integrating technology in ways that promote youth engagement and opportunities. This cross-sectoral approach ensures that the well-being of young people in digital environments (such as online youth centres and social media) is considered, even outside formal schooling. It broadens the perspective, shifting the responsibility for digital well-being from schools to society as a whole, including the community and extracurricular domains.

Estonia's president launched an AI Leap initiative for students and teachers (2025), which shows top-level commitment to empowering learners with cutting-edge tools while presumably also educating them about those tools' responsible use (Education Estonia, 2025). Public-private partnerships are common (e.g., tech companies collaborating with schools through programmes like ProteTiger or startup incubators for EdTech). This means resources and innovation flow into education, and there's attention on keeping Estonia's approaches updated.

Estonia supports digital well-being through a robust legal framework that spans transparency, safety, and responsible innovation. The Public Information Act (Riigi Teataja, 2025) promotes trust in digital platforms by ensuring access to public data and reinforcing privacy awareness. The Higher Education Act (Riigi Teataja, 2024)) guarantees students a safe learning environment and assigns shared responsibility for maintaining it, which when applied digitally, implies the need for secure, accessible, and non-intrusive online learning platforms. Similarly, the Organisation of Research and Development Act (Riigi Teataja, 2019) encourages ethical use of digital technologies, reinforcing a culture of responsibility that can influence ed-tech design and use in schools. Notably, the Adult Education Act (Riigi Teataja, 2025) includes direct references to digital well-being, requiring educators to understand the effects of digital tools on learners and to consider ergonomics, mental health, and digital safety in course design. This sets a progressive standard by embedding well-being in legal requirements, particularly for adult learning, and provides a model for broader application across education levels.

2.3 Malta

Malta has a comprehensive and clearly defined approach to digital well-being in education, as set out in several recent policy documents. The Malta Digital Education Strategy 2025–2030 is the country's flagship policy, providing a nationwide framework organised around four pillars: Nurturing Digital Global Citizens; Empowering Educators for the 21st Century;



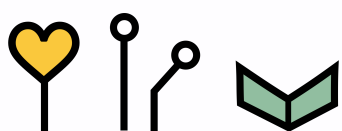
Community Engagement and Collaboration; and Enriching Digital Resources (Ministry for Education, Sport, Youth, Research and Innovation, 2025). The strategy comprises 14 measures and 79 specific actions, covering all levels of education. Notably, the pillars inherently cover well-being aspects: 'Nurturing Digital Global Citizens' implies a focus on the responsible, safe and ethical use of technology by students; 'Empowering Educators' ensures that teachers can guide students in digital spaces; 'Community Engagement' involves bringing parents and stakeholders on board (which is vital for a holistic approach to well-being); and 'Enriching Resources' addresses the issue of quality content, including resources that promote healthy digital engagement. In short, Malta's strategy does not treat digital well-being as an add-on, it is interwoven throughout its vision of quality digital education.

Malta's National Education Strategy 2024–2030 establishes an overarching educational framework that explicitly emphasises digital transformation, equity and well-being in all areas of education (Ministry for Education, Sport, Youth, Research and Innovation, 2023). By placing well-being on an equal footing with digital transformation, Malta ensures that the impact of any digital initiatives on student welfare and inclusion is taken into account. This approach is somewhat unique, as not all countries' main education plans address well-being in the digital context so directly.

Malta also has a National Cyber Security Strategy for 2023–2026. One of its goals (Goal 5) is to raise awareness of cybersecurity in academia and integrate cyber-safety into the curriculum (Ministry for the Economy, Enterprise and Sustainable Development, 2023). This demonstrates a forward-thinking approach to equipping students with the knowledge to protect themselves online and creating safer digital learning environments (e.g., schools educating students about phishing and the importance of strong passwords).

An important multi-stakeholder initiative is BeSmartOnline! Programme, which serves as Malta's Safer Internet Centre (Foundation for Social Welfare Services, 2025). It's run by a coalition of the Foundation for Social Welfare Services (which coordinates it), the Office of the Commissioner for Children, the Maltese Police Force, and the Education Directorate. This programme delivers digital safety education, awareness campaigns, and helpline/hotline services. By involving entities from child protection, law enforcement, and education, it ensures a 360-degree approach to online well-being for children. For example, the police handle a Cyber Crime Unit and a hotline for reporting online child abuse (ChildWebAlert system), the Children's Commissioner promotes child rights online, and educators integrate the lessons into the curriculum.

Malta's commitment to quality in education is evident in its approach to standards and accreditation. The National Quality Standards in Education Framework (2023) incorporates digital elements, and Malta actively participates in the eSafety Label initiative organised by



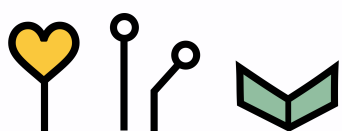
European Schoolnet (this will be discussed under best practices). In essence, Malta establishes internal standards and seeks external validation to guarantee that its schools adhere to the highest standards in digital practices and policies.

2.4 Lithuania

Lithuania's forward-looking State Progress Strategy, 'Lithuania 2050', provides a vision for holistic development (Office of the Seimas of the Republic of Lithuania, 2024). It advocates education (both formal and non-formal) that nurtures individuals in a well-rounded way, fostering competencies including digital, social, emotional and healthy lifestyle competencies. Significantly, this strategy integrates digital competence with emotional and healthy lifestyle skills, acknowledging that future citizens must balance technology use with psychological resilience and health. Additionally, a policy document on science, technology and innovation highlights the principle that technological progress should serve societal well-being and align with ethical values. This demonstrates the integration of an 'anthropological dimension': technology is not merely for economic growth, but must also consider human well-being and ethics. This indicates a high-level commitment to human-centric digital transformation.

In recent years, Lithuania's education sector has undergone rapid digitalisation, guided by strategic documents that, while not explicitly labelled as "digital well-being" policies, lay important groundwork for them. The National Education Development Programme for 2021–2030 is the country's overarching policy and roadmap for improving education by 2030 (Government of the Republic of Lithuania, 2021). One of the key issues highlighted in the programme is the insufficient use of educational technologies and digital innovations to enhance the efficiency of the education system and improve learning outcomes. Integrating digital tools is essential for quality education; poor integration can therefore hinder student outcomes, which are tied to well-being in terms of learning success and stress levels.

Another key strategic document is the National Digital Decade Roadmap of the Republic of Lithuania (Ministry of Economy and Innovation, 2024), which brings national efforts into line with the EU's Digital Decade objectives. The plan monitors Lithuania's digital transformation, emphasising the importance of a digitally skilled population and secure, high-performing and sustainable digital infrastructure. It includes initiatives to improve digital skills among vulnerable groups and to strengthen cyber resilience. Although it does not mention "digital well-being" explicitly, it emphasises the importance of safe behaviour in the digital environment and the recognition of digital threats, both of which are essential for individuals to feel safe and confident online. We can therefore infer that the national authorities view the

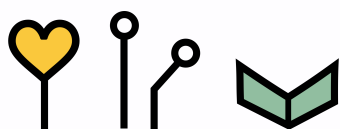


ability to 'feel safe in the digital environment' as a prerequisite for well-being, even if this is not explicitly stated.

Importantly, in 2023, Lithuania introduced the Guidelines for Digital Education ('Skaitmeninio švietimo gairės') – a policy designed specifically for schools, particularly school leaders, to promote digital inclusivity, safety and competence development throughout the education system (Kurk Lietuvai, 2023). The Guidelines focus on areas including infrastructure, teacher training, student digital competence, and cybersecurity. The Guidelines explicitly promote well-being: one objective is to reduce disparities in digital readiness among schools to prevent a digital divide between students; another is to encourage schools to adopt a strategic, long-term approach to integrating technology into teaching and learning. By defining what a 'school adapted to the digital age' should look like and encouraging strategic integration, the guidelines effectively encourage schools to consider factors that include well-being, such as equal access and thoughtful implementation, rather than relying on ad hoc tech use.

Lithuania is also addressing specific issues through targeted actions. One example: September 2025, the Ministry of Education, Science and Sport established a working group to develop national rules on mobile phone use in all schools. The group will include education and health experts, schools with effective phone rules, etc., to create a unified approach (Švietimo, mokslo ir sporto ministerija, 2025). This indicates recognition at the policy level that unmanaged smartphone use in schools can affect student well-being (distraction, cyberbullying, etc.), and that a balance is needed between outright bans and free use. Many countries have left phone policies to individual schools; Lithuania's decision to standardise guidance suggests a proactive stance on a contentious digital well-being issue.

Another concrete measure was the development (in 2020) of Practical Guidelines for Schools and Families on the Use of Smart Devices and the Internet, by the Centre for Digital Ethics with Children Support Centre (Skaitmeninės etikos centras & Paramos vaikams centras, 2020). These guidelines serve as a resource for school communities to adopt a culture of responsible internet and device use, even suggesting they can be integrated into a school's code of conduct. Emphasising a school's position on internet/device use and risk prevention is described as foundational for creating digital well-being in the school. Such materials contribute to raising awareness among students, teachers, and parents about healthy digital habits (e.g., when and how devices should be used or put aside).

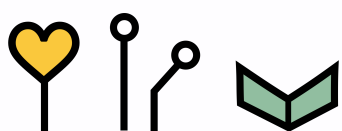


2.5 Finland

Finland has developed a comprehensive policy framework that explicitly incorporates digital well-being into education. The 2014 National Core Curriculum for Basic Education embeds digital competence and the responsible use of technology as transversal skills to be taught across subjects (Finnish National Agency for Education, 2016). It requires schools to promote the safe, balanced and responsible use of ICT among students aged 7–16, covering areas such as online etiquette, media literacy and healthy screen time habits. Digital well-being is viewed holistically as part of the whole-school culture and pupil welfare system.

Recent national strategies in Finland reinforce these principles. The Policies for the Digitalisation of Education and Training until 2027 set the following system-wide goals: 'equitable digital access', 'cyber-secure infrastructure' and 'learner well-being'. The policies call for the continuous improvement of students' and teachers' digital skills, as well as the monitoring of digital well-being outcomes (e.g., tracking indicators such as screen time balance or cyberbullying rates) (Ministry of Education and Culture, 2023). Similarly, Finland's National Digital Compass 2030 (aligned with the EU's Digital Decade programme) stresses the importance of a human-centric digital transformation, incorporating trust, safety, and inclusion as core principles (Ministry of Economic Affairs and Employment of Finland & Coordination Group for Digitalisation, 2022). Another policy instrument is the Framework for the Digitalisation of Education 2022–2030, which is developing concrete measures for early childhood education (ECE) through to adult education, with the aim of ensuring the use of digital learning tools is inclusive, safe and evidence-based (Ministry of Education and Culture of Finland, 2022). Notably, the timelines of these multiple strategies overlap, which has raised coordination challenges. Finland is also preparing a new law restricting student smartphone use during lessons, known as the 'mobile phone law', which is expected to bolster digital well-being by reducing distractions.

Historically, Finland has granted schools and municipalities considerable autonomy in implementing the curriculum. This has resulted in variations in practice: for instance, some cities enforce a 1:1 device programme with strict phone rules, whereas others rely on BYOD (Bring Your Own Device) with minimal screen time guidance. Such disparities have prompted the national authorities to consider introducing more uniform standards (hence the forthcoming mobile phone legislation). Overall, Finnish policy favours guidance and education over bans, teaching pupils to self-regulate their technology use is part of the curriculum. Data privacy and online safety are taken seriously: Finland has aligned with new EU regulations, such as the Network and Information Security (NIS) Directive on cybersecurity and the pending Artificial Intelligence (AI) Act, to ensure that even the smallest schools uphold data protection and security requirements. One challenge has been providing



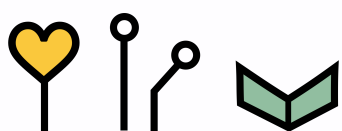
support for small municipalities to meet these technical obligations. Policies recommend pooling resources or central support services, but funding for this has been limited. Another regulatory focus is monitoring and evaluation: the Finnish Education Evaluation Centre (FINEEC) assesses the rollout of the curriculum and has noted that, although the implementation of digital competence goals is largely successful, teachers require additional support and training to ensure consistency.

Operationally, existing national and municipal initiatives already translate these policy aims into everyday practice. The Digitutor mentor network supports teachers to use technology purposefully and to nurture healthy classroom routines; the DigiOne service platform pilots a unified, secure environment that connects learning, timetable and welfare data to enable early support; the evidence-based KiVa programme includes cyberbullying prevention and peer-support practices; nationwide campaigns such as Media Literacy Week and Safer Internet Day reinforce safe and responsible use; and the 'New Literacies' (Uudet lukutaidot) descriptors provide age-phase guidance on media/ICT competences, including balance and online ethics. Together these mechanisms provide a scaffold for digital well-being through peer mentoring, secure services, prevention science and age-appropriate competences, aligning with national objectives on equitable access, cyber-secure infrastructure and learner well-being.

3. Comparative Analysis of Approaches

The participating countries (Spain, Lithuania, Estonia, Finland and Malta) each operate in different contexts but share the challenge of aligning digital innovation in education with the well-being of their students and teachers. By comparing their regulatory and policy approaches, we can discern patterns, gaps, and opportunities that inform broader European policy development.

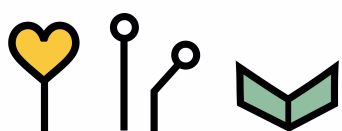
One clear **distinction lies in how clearly and with what kind of focus and emphasis each country addresses “digital well-being”** in its policy documents. Malta stands out for directly embedding well-being and safety across its digital education strategy (with pillars on community engagement and digital citizenship) and aligning initiatives with well-being outcomes. Spain and Lithuania, on the other hand, incorporate digital well-being more implicitly. Spain's policies focus on digital competence and transformation, touching on well-being elements (like safe use, healthy habits) in subordinate frameworks or regional programmes rather than as a central pillar. Lithuania's strategies emphasise strategic



digitalisation and mention holistic learner development (Lithuania 2050 vision includes emotional and social competencies alongside digital), but concrete digital well-being measures largely appear in guidelines and recommendations rather than in binding policy. Estonia similarly integrates well-being principles (like safe study environment, mental health considerations) into various strategies and laws, yet hasn't articulated a standalone concept of "digital well-being" in education policy. This suggests an opportunity: most countries could benefit from making digital well-being a more explicit objective in national strategies, as Malta and Finland have done, to ensure coherent focus and accountability.

The approaches vary **from highly centralised to more decentralised**. Malta's model is quite centralised with national programmes (ODPC, BeSmartOnline!, helplines) rolled out uniformly and monitored by central agencies. This ensures consistency and equity, as evidenced by 100% device coverage and standardised curriculum integration nationwide. Finland has broadly adopted digital well-being policies at the municipal and school levels. Spain and Lithuania have more mixed approaches; they set national frameworks and plans, but a lot of implementations are left to regions (in Spain's case) or individual schools (in Lithuania's case). For example, Spain's autonomous communities have leeway in education, leading to region-specific initiatives like Catalonia's digital citizenship curriculum (XTEC Project, n.d.). Lithuania's lack of national rules until now meant each school could devise its own device policies. This can lead to regulatory patchworks where digital well-being measures depend on local leadership. Estonia's approach is somewhat middle-ground: strong national infrastructure and digital services, but also encouraging local innovation (schools apply for programmes like [Digital Accelerator](#) voluntarily). For policymakers, this comparison indicates that balance is key. Centralised standards (e.g., on data privacy, minimal safety requirements) are necessary to ensure every student is protected, while decentralised innovation (like Estonia's bottom-up EdTech solutions or Spain's regional projects) can produce context-tailored best practices. An EU-level recommendation might be to establish core guidelines for digital well-being (ensuring no school falls below a safety baseline) while promoting exchange of diverse local solutions.

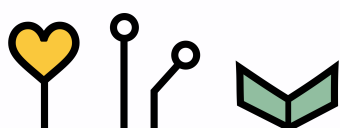
All five countries recognised that without addressing **infrastructure and access**, digital well-being cannot be achieved. Malta and Estonia have near-universal connectivity and have largely closed the access gap (Malta with 100% VHCN broadband; Estonia with over 93% household internet penetration and extensive e-school infrastructure). Spain and Lithuania, while improved, still report internal divides: Spain noted significant regional disparities in connectivity and teacher training resources, and Lithuania pointed out differences between well-resourced and under-resourced schools. Each country has taken measures: Spain's Connected Schools and device procurement programmes, Lithuania's EdTech and Millennium Schools projects funding equipment, Estonia's long-standing Tiger Leap initiative and continuous IT investment, Malta's ODPC and free internet for low-income



families. The comparative takeaway is that equity of access is foundational; countries that solved it (Malta, Estonia) can focus energy on higher-order issues like pedagogy and well-being metrics, whereas countries still bridging that gap (Spain, Lithuania) must continue those efforts in parallel with well-being initiatives. Notably, even in high-performing Estonia, regional disparities in digital competence persist, and in Malta, attention to smaller schools and islands remains necessary. Therefore, all countries should continue targeted support to the last pockets of the divide. At the European level, funding from cohesion policies and the Recovery and Resilience Facility is instrumental for this, as national comparisons show that sufficient funding (Malta leveraged 80% EU co-funding for ODPC) accelerates closing these gaps.

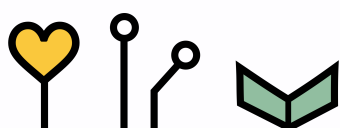
There is a common emphasis on **teaching students to navigate digital spaces safely and effectively**, but the depth and formalism of integration vary. Malta has a dedicated, graduated digital literacy curriculum with certification, and also infuses online safety in PSKD lessons and whole-school practices (eSafety Label). Spain includes digital literacy mostly under its broader curriculum reforms and via frameworks; concepts like media literacy, cybersecurity, and digital citizenship are often part of technology or civic education classes. Estonia has integrated digital competence as a cross-curricular key competence and uses initiatives like ProgeTiiger to bring coding and safety awareness from early ages. Finland has KiVA Anti-Bullying programme which also includes cyberbullying modules which have been proved to increase safety for students in digital spaces. Lithuania updated its curriculum to include digital literacy even in pre-school and early primary (one of 18 areas of achievement), and uses Safer Internet programme resources for continuous learning about online safety. The comparative insight is that while all have something in place, Malta's approach is more structured (a cohesive programme across years with assessment), whereas others are more patchwork or evolving. Countries can learn from each other: for instance, Spain or Estonia might look to Malta's age-specific approach and certification, while Malta could learn from Estonia's focus on creative digital production (e.g., how Estonia engages students in making digital projects which can improve engagement and well-being through active learning). At an EU level, frameworks like DigComp for citizens and BIK (Better Internet for Kids) provide common reference points; a pan-European competence model for "digital well-being" literacy could be a logical next step, combining digital skills with social-emotional skills for online life.

Teachers are essential for implementing any digital well-being policy. All five countries acknowledge boosting teachers' digital competences, but the content of training and support for well-being specifically differs. Spain adapted the DigCompEdu for teachers (MRCDD) and requires teachers to upskill, yet many Spanish teachers feel they need more practical training on fostering students' healthy digital habits. Lithuania executed large-scale training (thousands of teachers trained) focusing on digital skills and pedagogical integration,



and also provided tools like SELFIEforTeachers for reflection. However, Lithuania noted that, the teacher digital competence development model DigCompEdu should become the reference CPD model and could be even broadened to cover social-emotional aspects of digital learning (e.g., recognising digital fatigue in students). Estonia's teachers generally have strong digital skills, and the country has begun recommending that teacher education include more on digital teaching strategies and well-being awareness (e.g., from the Digiefekt recommendations). Malta invested heavily in continuous professional development aligned with DigCompEdu and even offered incentives and recognition for teachers who innovate with tech. Maltese teachers also have access to peer mentoring and Erasmus+ opportunities to learn best practices, which helps them not only use tech but also manage it in a balanced way in class. A cross-country comparison indicates that quantity and quality of training are both important. Training must go beyond technical know-how to include classroom management in the digital age, safeguarding student well-being (like handling cyberbullying incidents), and even managing teachers' own digital workload. For example, an evidence-based recommendation across these countries is to integrate modules on "digital pedagogy and student well-being" into teacher certification and in-service training.

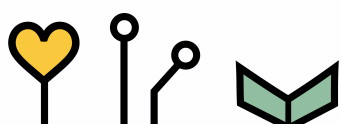
Moreover, **support to schools and parents shouldn't end with training for teachers:** ongoing support networks (like Estonia's educational technologists in schools, or Malta's peer communities) are crucial to help teachers adapt continually. The countries that have formal structures (Malta's Institute for Education programmes, Estonia's network of tech coordinators) show more sustained progress. Mental Health and Psychosocial Support: This dimension of digital well-being shows the greatest divergence among the countries. Malta and Finland clearly lead with a pre-emptive and multi-layered system (curriculum integration of well-being, on-site psychologists, a national helpline, and an online counselling platform). Spain and Lithuania rely more on general student support services and have noted that mental health in relation to digital use isn't sufficiently covered in policy. Spain has school counsellors and psychologists, but their work on "digital" issues depends on individual school initiatives rather than a national programme. Lithuania flagged that digital well-being is not really on the national agenda yet and called for its inclusion, though it does have tools like the Centre for Digital Ethics guidelines and a plan to address phone use, which focus on preventive culture. Teacher primary education institutions (universities) invest a lot into teacher and school support schemes in Lithuania and could be exploited as the potential teacher support centres for consultation, training, and constant guidance. Estonia is somewhere in between: it has strong awareness (via the Human Development Report highlighting teens' emotional issues from overuse and some NGO-driven solutions like Helge Kool mood tracking and peacsi.ee counselling), but these are not yet scaled nationally through the education system.



The common trend is a growing realisation that **digital education strategies must be coupled with mental health strategies**. The difference lies in readiness and scale of response. Countries like Malta prove that integrating mental health support (both preventive and reactive) into the education system is feasible and beneficial. Others can follow by establishing dedicated helplines (if not already existent through Safer Internet Centres), training school counsellors on digital issues, and including digital wellness in health education curricula. On an EU level, initiatives like the upcoming SELFIE tool module on well-being (as per the JRC's WBDE project) and Erasmus+ projects focusing on youth digital resilience can help disseminate good practices. The countries agree this is an interdisciplinary area where research and practice, as well as interdisciplinary teams of experts should find the way to collaboratively shape guidance, recommendations and policies in a continuous way. Academies and universities should be exploited as they have great potential in the field together with school communities. Table 1 below summarises and compares some key facets of these five countries' approaches to digital well-being in education:

Table 1. Comparison of National Approaches to Digital Well-Being in Education - Student Device Use Policy, Integration of Digital Well-being and Notable Initiatives/Policies.

Country	Student Device Use Policy	Integration of Digital Well-being	Notable Initiatives/Policies
Finland	Local rules; considering new national "mobile phone law" to limit phones in class (balance autonomy with concerns). Generally promotes guided use over bans.	Digital well-being explicitly in curriculum (transversal competence). Multiple national strategies (Digitalisation 2027, etc.) prioritise learner well-being alongside access. Monitoring of well-being outcomes starting (plans for indicators).	KiVa anti-bullying programme (incl. cyberbullying); New Literacies curriculum (media/ICT literacy with safe use benchmarks); DigiOne unified platform with welfare alerts; strong teacher digital training network (Digitutor).
Estonia	No blanket phone bans guidelines issued (especially <13), schools set own rules. Phones seen as learning tools; used in class when teacher permits. Trust-based approach, high digital literacy culture.	Digital competence and well-being woven throughout strategy and curriculum. Emphasis on ethics, safety, and balanced use taught across subjects. New AI Leap initiative integrating AI with focus on ethics & equity.	Tiger Leap legacy (nationwide connectivity). AI Leap programme (free AI tools for students with digital ethics training). Active Safer Internet Centre. Estonia opts for guidance over prohibition – a best practice fostering responsible use. Top



			PISA performer partly due to effective digital integration.
Lithuania	No national phone ban yet; many schools have rules (e.g., no phones during class by default). Focus on educating students on appropriate use rather than outright prohibition.	Updated 2022 curricula include safe & responsible tech use as a core element. Digital literacy and well-being are part of key competences. National Ed. Strategy aligns with well-being goals. Guidelines for remote learning safety issued.	National Digital Education Guidelines (2023) for schools – define what a “digitally mature, safe school” is. Device access programme (35k laptops during COVID) bridging digital divide. Friendly Internet (Draugiškas Internetas) initiative for e-safety education and hotlines.
Spain	Moving toward strict regulation: 2024 proposal for zero phone use in primary and phones off in secondary (with rare exceptions). Several regions already enforce bans. Likely to implement nationwide to curb distractions and online risks.	Digital well-being gaining prominence. New curricula embed digital citizenship and safety. National strategy mandates a digital safety & well-being policy for schools by 2025. Emotional well-being programmes in schools include ICT abuse prevention.	Emotional Well-being Programme (2024) with funding for mental health in schools (includes awareness on tech overuse). AEPD’s Children Digital Health & Privacy Strategy – 10 actions (age verification, family education, etc.). Educa en Digital device initiative coupled with digital skills training. Strong Safer Internet Center (“Internet Segura for Kids”) operations.
Malta	No official blanket ban; schools often restrict phones on premises. New guidelines under development as part of 2024–30 strategy to ensure consistent rules for safe device use.	Digital Education Strategy (draft) explicitly integrates well-being (physical, social, emotional) as a key pillar. The digital literacy curriculum includes digital ethics and health topics. A whole-school approach to digital safety is promoted.	BeSmartOnline! Safer Internet programme – nationwide awareness, helplines. Digital Education for All initiatives ensuring every learner has access plus understanding of safe use. Planned Digital Safety in Schools Policy (by 2025) to holistically address

			e-safety and well-being in education.
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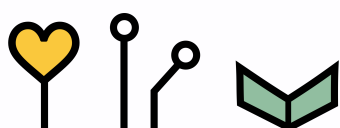
In summary, the comparative analysis reveals that all countries are grappling with similar themes (access, digital literacy, teacher digital competences, safety, mental health), but their approaches and levels of maturity differ. Best practices exist within each that could inform others: Finland's long term experience, Spain's participatory approach, Lithuania's national guidelines focus, Estonia's innovative projects, Malta's integrated model. There is clear value in fostering international dialogue so that these insights can be shared. In the following section we introduce the best practices found in partnering countries' digital well-being policy implementation.

4. Best practices of Digital Education Policy Implementation

4.1 Spain

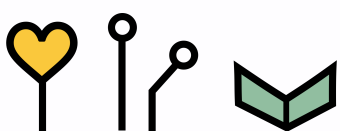
Spain offers several notable initiatives that contribute to digital well-being and can be considered best practices:

- **Connected Schools Programme:** Since 2015, Spain (with European Regional Development Fund co-funding) has implemented Escuelas Conectadas (Connected Schools) to extend high-speed broadband and Wi-Fi to schools nationwide. By ensuring reliable internet access, this initiative helps reduce the stress and inequality caused by lack of connectivity. It lays the groundwork for all students to participate in digital learning and for teachers to integrate online safety and well-being resources into their teaching. The programme's focus on infrastructure, while technical, has a well-being payoff: when all students can get online without frustration, and all schools can employ modern digital tools, the conditions for a positive digital learning experience improve.
- **The Código Escuela 4.0 (Code School 4.0) programme:** Spain has launched programmes to foster digital skills that indirectly support well-being by promoting purposeful use of technology. The Código Escuela 4.0 for example, develops computational thinking and programming skills among teachers and students



nationwide (España Digital 2026, n.d.). It provides schools with educational robotics kits and training so that even non-specialist teachers can integrate coding from early grades, helping students move from passive screen consumption to active, creative use of technology. Such initiatives, while focused on skills, contribute to well-being by shifting students from potentially unhealthy digital habits to more constructive and engaging activities.

- **eduCAT (Catalonia):** At the regional level, Catalonia's eduCAT programme (an education technology initiative) has improved both connectivity and pedagogical use of ICT in schools. By strengthening digital competencies and aiming to improve academic performance, eduCAT implicitly supports well-being – recognising that confident, competent use of technology can mitigate anxiety and disengagement. It also explicitly aims to make digital learning more effective and engaging, which can boost student satisfaction and outcomes.
- **National Congress of Good Practices in Teacher Training:** Organised by Spain's National Institute of Educational Technologies and Teacher Training (INTEF), this annual congress provides a platform for educators to share innovative experiences in digital education. Topics have included use of artificial intelligence in teaching, gamification, and personalised learning. This peer-learning approach helps disseminate methods that can improve student engagement and reduce negative aspects of digital learning. For example, gamification strategies shared at the congress might help teachers harness students' interest in technology in healthy, educational ways, potentially reducing off-task screen time or boredom.
- **mSchools Student Awards:** An initiative in partnership with Mobile World Capital Barcelona, the mSchools programme hosts an annual competition that recognizes primary, secondary, and vocational students for digital projects they create (such as apps, digital stories, Scratch programming challenges). By channelling students' creativity and digital skills into constructive projects, the competition promotes positive digital behaviours and entrepreneurship. The mSchools Student Awards celebrate students' creativity and teamwork in technology, which can enhance their sense of achievement and digital self-efficacy – all contributing to well-being. It also implicitly encourages mentorship and guidance from teachers on these projects, fostering healthier student-teacher relationships around technology.
- **Student Digital Rights Manifesto (EdTech 2025 Conference):** In 2025, a group of Spanish students from various institutions drafted a "manifesto" on digital education concerns, presented at an EdTech conference in Barcelona. This manifesto articulated students' viewpoints on issues like data privacy, screen addiction, and the quality of online content in education. The mere existence of such a manifesto is a best practice in participatory policy-making, highlighting the importance of including student voices. It brings youth perspectives directly to policymakers and educators, encouraging them



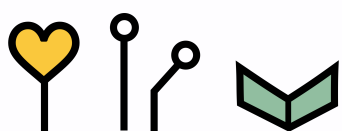
to address real needs (e.g., balancing digital and offline learning, ensuring engaging content) that affect student well-being.

These examples show Spain's vibrant ecosystem of programmes and dialogues around digital education. They contribute to digital well-being by either improving the conditions for healthy digital engagement (infrastructure, skill development) or by actively involving stakeholders in shaping how technology is used. However, it's notable that many of these initiatives focus on digital competence and innovation; explicit framing of "digital well-being" per se is still emerging. Spain is beginning to recognise this: for instance, the Observatorio de Derechos Digitales (Digital Rights Observatory) was established to protect fundamental rights in the digital environment, which includes ensuring citizens (especially children) can exercise their rights safely online. Such institutions can provide knowledge and tools to improve digital well-being in schools (for example, by advising on ethical tech use and online safety measures).

4.2 Estonia

The European Innovation Scoreboard 2024 confirms Estonia's strong performance in digital competences and infrastructure, providing a supportive environment for digital initiatives in education (European Commission, Directorate-General for Research and Innovation, 2025). Estonia's Foresight Centre has researched aspects of digital well-being in education, focusing on data reuse, digital literacy, and equal access to technology (Foresight Centre [Arenguseire Keskus], n.d.). Their research underscores the importance of developing data-driven tools (e.g., learning analytics) while ensuring equitable access and clear regulations.

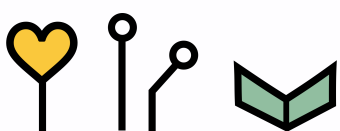
A notable source of insight is the Estonian Human Development Report 2023, which contains a chapter on "Use of digital tools, digital skills and mental well-being" (Kalmus et al., 2023). This report is one of the first official documents in Estonia to explicitly link digital tool usage with mental health outcomes. It finds that while digital technologies bring educational benefits, excessive or unbalanced use can negatively affect mental health. For example, many Estonian adolescents feel the digital environment is quite safe and report good digital skills, yet a significant number have emotional problems. Crucially, the report identifies self-reported internet overuse as a key factor related to these issues. It can create a vicious cycle where excessive internet use leads to problems at home and school, which then pushes youth to retreat further online for escape. This pattern is exactly what digital well-being policies need to address (through interventions like digital time management education, mental health support, etc.). The report's recommendations urge Estonia to promote digital



literacy hand-in-hand with mental well-being initiatives, acknowledging that one without the other is insufficient.

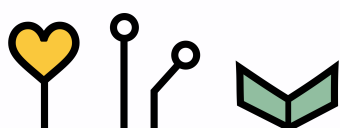
There are several initiatives and recognitions to support digital well-being in Estonia.

- **Global Future Fit Award for Digital Education:** Estonia's Education and Youth Board (Harno) received the Global Future Fit Award at the 2025 World Government Summit for its outstanding, socially impactful digital education initiatives. This international recognition highlights Estonia's leadership in integrating technology and innovation into education.
- **IT Academy Programme:** A comprehensive, long-term partnership between the state, businesses, and universities to advance IT education. The IT Academy improves the quality of ICT vocational and higher education, boosts research, and helps meet industry needs by training and reskilling specialists. Results include lower dropout rates and higher graduates; today 1 in 10 Estonian university students chooses an ICT specialty, and one-third of those are women.
- **ProgeTiiger Programme:** A nationwide initiative to integrate informatics, coding, and robotics into early education. ProgeTiiger helps students move from being tech users to creators by updating curricula, providing teaching materials, training teachers, and hosting student competitions. By 2025, almost all Estonian schools and kindergartens have participated, with 50,000+ students involved in tech events and 7,000+ teachers trained in digital skills.
- **Artificial Intelligence and Digital Teaching Methods:** A programme by Harno bringing AI tools and digital pedagogy into classrooms. It has reached hundreds of schools and thousands of learners via free online micro-courses that explain AI's fundamentals, uses, and challenges. Educators receive practical training to integrate AI (e.g. chatbots, visual content generators, etc.) into teaching, working alongside students to make learning more efficient and meaningful. These efforts are carried out in close collaboration with schools, universities, employers, and government agencies.
- **AI Leap 2025:** A bold national initiative ("Tehisintellekti Hüpe 2025") launched by President Alar Karis to give students and teachers free access to cutting-edge AI tools and training from autumn 2025. Built on the legacy of the 1990s Tiger Leap, AI Leap's first phase will involve 20,000 high schoolers and 3,000 teachers, later expanding to vocational schools. In partnership with OpenAI, Anthropic, and other top AI developers, the programme equips schools with AI chatbots (like a tailored ChatGPT Edu) and other resources. This public-private endeavor aims to make learning more personalised and to prepare Estonia's future workforce for an AI-driven world.
- **Digital Education Quality Label:** A quality certification for e-learning offered by the Estonian Quality Agency for Education (HAKA). It has been a national benchmark of excellence in digital and blended learning since 2008. Now open to educators



worldwide, the label provides a rigorous evaluation and feedback process, helping educators continuously improve their online courses and showcase high-quality digital teaching practices.

- **Digital Accelerator Programme:** A 2018–2021 school development programme designed to accelerate digital transformation in education. It provided intensive training and mentoring to school teams to boost teachers' digital competences and everyday use of technology. The Digital Accelerator Collection was created to share best practices – covering how to map a school's needs, plan digital learning and curriculum changes, improve digital infrastructure, and ensure cybersecurity – from the perspectives of headteachers, educational technologists, and teachers. In total, 71 Estonian schools participated in the Digital Accelerator programme, funded by the Ministry of Education and Research.
- **Digital Competence Initiative:** Estonia's clear and simple framework for digital skills, aligned with the EU's DigComp 2.1 framework for students and DigCompEdu for teachers. It defines key digital competences (from information literacy to safety) and provides assessment criteria for each education level so that students can set learning targets and teachers can evaluate and improve their digital skills. A complementary self-assessment tool and digital skills glossary support its implementation. This initiative ensures that digital skills development goes hand-in-hand with mindful and safe technology use, contributing to learners' overall well-being.
- **Helge Kool (Bright School):** An initiative by the Good Deed Foundation (Heateo Sihtasutus) that uses data to prevent student burnout and improve mental well-being in schools. With support from the Good Deed Impact Fund, it developed a web app that regularly gauges students' moods and coping skills. Each student receives personal feedback on their well-being, while support staff get an anonymous overview of the whole school and homeroom teachers see their class's overall status. The Helge Kool platform helps schools quickly spot students losing their joy in learning and intervene with support at an early stage, making school a happier place for over 8,000 student users.
- **Peaasi.ee (Mental Health Portal):** A non-profit initiative (MTÜ Peaasjad) focused on youth mental health – emphasizing prevention, early intervention, and stigma reduction for issues like anxiety or depression. Its team of mental health professionals, youth workers, and educators offers online counselling, self-help information, e-courses, and group training for young people (ages 16–26). With backing from the Good Deed Impact Fund, Peaasi.ee expanded its services (including a youth counselling centre) and provides mental health first aid training – enabling educators and the public to support teens in distress. These efforts improve access to help and promote a culture of mental well-being in schools.

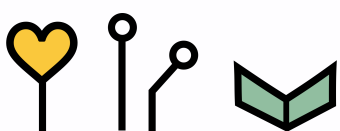


Estonia's education system blends digital innovation with student well-being, creating a future-ready learning environment. From robust ICT education programmes (like IT Academy and ProgeTiiger) to pioneering AI-integration initiatives (AI Leap 2025) and quality standards (Digital Education Quality Label), Estonia ensures that both students and teachers are equipped with advanced digital skills. At the same time, dedicated well-being projects such as Helge Kool and Peaasi.ee safeguard mental health, showing a holistic approach to digital well-being. This comprehensive strategy has not only modernised learning but also earned Estonia international acclaim as a leader in digital-age education.

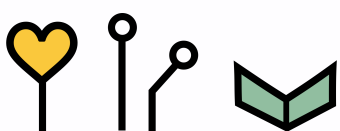
4.3 Malta

Malta's policies have translated into tangible actions and outcomes, often cited as exemplary within the EU. In terms of implementation:

- **Universal Device and Connectivity Access:** By achieving one-to-one device provision in schools, Malta ensures that all students can participate in digital learning without fear of exclusion due to socioeconomic status. This has immediate well-being implications: students aren't stigmatised for not having a device; homework can be assigned digitally with confidence that everyone can complete it; learning can continue seamlessly during disruptions (as evidenced during the COVID-19 pandemic). The statistic of 15,000 tablets distributed in primary schools and full laptop coverage in secondary schools means Malta met its ODPC goals. Moreover, these devices were rolled out with a pedagogical framework, teachers received training on using them, curriculum was adjusted to integrate them, and technical support was provided. This comprehensive approach (rather than just dumping hardware in schools) is a best practice that many initiatives elsewhere lacked. It created a more equitable and stress-free environment where technology is concerned, thereby improving digital well-being (students don't have to scramble for devices or feel anxious about not having access).
- **Safer Internet and Online Safety:** The BeSmartOnline! Programme, through its multi-agency efforts, has had impressive reach. It directly educated over 8,000 children and youth on safe internet use and trained more than 2,000 professionals (teachers, social workers, etc.) in online safety by its latest phase. It also operates a helpline (a national 179 support line) for internet-related issues and a hotline for reporting abuse. These measures mean Maltese children have resources to turn to if they encounter cyberbullying, grooming, or distressing content, which is a critical support for their well-being. The programme's visibility and clear governance (annual action plans, dedicated funding streams) have made it a sustained success.



- Integration of Digital Literacy and Citizenship in Curriculum:** Malta introduced the ICT C3 curriculum in secondary schools, which offers a progressive, age-differentiated digital citizenship and ICT course culminating in a certification aligned with the Malta Qualifications Framework (MQF Levels 1–3). This curriculum starts with basic online safety and digital skills in early years and advances to more complex topics like programming, emerging technologies (e.g., blockchain, AI), and even digital entrepreneurship for older students. By structuring this learning pathway, Malta ensures that by the time students finish compulsory schooling, they are not only proficient in using technology but also aware of its implications, opportunities, and risks. The fact that it's tied to formal certification also motivates students and gives recognition to their digital competence. This is a clear investment in preventative well-being: an educated digital citizen is more likely to use the internet responsibly and less likely to fall victim to online harms.
- Mental Health and Well-being Support System:** Malta has woven mental health support into the fabric of its educational digital strategy in a four-tier model: (1) Preventive curriculum integration via Personal, Social, and Career Development (PSCD) lessons that cover online well-being and healthy lifestyles, (2) School Psychological Service providing on-site professional counselling, (3) a national 24/7 Mental Health Helpline (1579) that anyone (students, educators, families) can call for urgent support, and (4) Kellimni.com, an online counselling service specifically for youth, offering free sessions with trained professionals via chat or email. This comprehensive ecosystem means that whether a student is experiencing cyberbullying-induced anxiety, screen addiction issues, or any stress exacerbated by digital life, there are multiple entry points to get help. It also raises awareness that mental health is taken seriously; for instance, campaigns like the “#DigitalDetoxChallenge” encourage students to periodically disengage from devices to find balance. These initiatives collectively foster a culture where digital well-being is about mental and physical health, not just safety and skills.
- Teacher Training and Parental Engagement:** Over 2,000 educators have been trained in Malta's continuous professional development (CPD) programmes on digital pedagogy and well-being. The Institute for Education offers courses and qualifications to teachers on integrating technology effectively. Additionally, Malta invests in educating parents: digital parenting sessions are held through local councils across Malta and Gozo, multilingual resources are provided to families, and schools organise parent-teacher discussions on managing children's technology use. By engaging parents, Malta addresses the home component of digital well-being—guiding parents to set healthy boundaries and support their children's online activities. This community approach acknowledges that policy doesn't end at the school gate; it extends into homes and neighbourhoods.



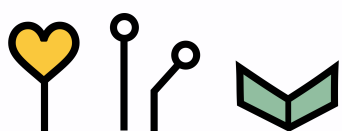
Malta's one of strengths is data monitoring. For instance, by the numbers: 55 schools (a significant proportion of Maltese schools) have earned eSafety Label certification (bronze, silver, or gold) from European Schoolnet, indicating systematic adherence to digital safety standards. The government also publishes annual reports (e.g., the Malta Communications Authority digital safety reports) evaluating progress. Such monitoring shows strong implementation and also highlights areas for improvement.

4.4 Lithuania

Lithuania's implementation of digital education reforms has been quite robust in terms of improving access and skills, though explicit "well-being" outcomes are less documented. As part of earlier strategies (like the National Education Strategy 2013–2022), Lithuania significantly increased technology availability in schools: by 2022, nearly half of general education schools had modern labs or technical classrooms (up from 29% in 2015), use of multimedia projectors and interactive whiteboards expanded, wireless internet became common, and more schools adopted virtual learning environments. The provision of ICT tools to students also improved, indicating progress in ensuring students have the devices needed for digital learning. All these improvements address the infrastructure aspect of well-being – students can benefit from digital learning opportunities when the tools are available and reliable.

Under the EdTech project ("Implement EdTech digital transformation of education"), concrete outputs were achieved by 2024: 150 participants underwent training on integrating technology into teaching; a network of ~100 educational innovators and consultants was established; 514 teachers completed IT specialisation studies; and about 2,470 school teachers plus 800 university lecturers completed 40–66-hour training on strengthening digital competences. This large-scale capacity-building suggests that many educators are now better equipped to use digital tools effectively. Additionally, a digital competence development programme for teachers was created and aligned with European models (DigCompEdu), assessing teachers on a spectrum from A1 to C2 level and using tools like SELFIE for Teachers for self-evaluation. This focus on teacher competence is critical – it lays the groundwork for teachers to also impart safe and balanced tech use to students, though the training primarily emphasised technical and pedagogical skills rather than specific well-being training.

Lithuania also invested in developing digital content and tools: an Education Portal (eMokykla.lt) now provides free access to a repository of digital teaching tools, content, and even a lesson planning platform for distance/hybrid learning (Plan@ or "Planeta"). Hundreds of digital teaching resources, simulations, and even entire modules have been digitised under



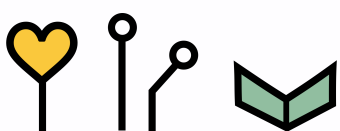
the EdTech project and made available to all schools. By enriching the educational content ecosystem, these steps help prevent scenarios where students roam unsupervised on the internet for information (reducing exposure to harmful content) or where teachers overburden students with poorly designed online tasks. In other words, good content and tools can improve engagement and reduce some negative outcomes (like boredom, frustration, or exposure to misinformation), thereby supporting well-being.

Pilot programmes and innovation testing have also been part of implementation. Between 2022–2024, Lithuania tested various digital solutions in schools – from a career education platform (Spotiself), to a plagiarism detection and AI tool (Identific), to a media literacy course (Very Verified), and others. Over 370 schools and 20,000 students participated in these pilots. Such testing indicates an openness to incorporate new tools that could address well-being issues (for example, media literacy courses build resilience against fake news and online harm). Moreover, developing and disseminating tools like Planeta for lesson planning helps teachers manage hybrid learning more effectively, which can ease their workload stress and improve the structure of students' digital learning time.

“Implement EdTech digital transformation of education” (coded 12-003-03-01-02). (Government of the Republic of Lithuania, 2022) focuses on developing digital competences, improving infrastructure, providing digital tools, and creating digital content. The target groups are broad – all participants in the education system, from pupils (including those with special needs and in Lithuanian schools abroad) to teachers and higher education staff. Notably, while the measure does not explicitly mention “well-being,” its inclusive approach (ensuring even vulnerable groups are reached) and emphasis on teacher skills and content quality contribute to well-being outcomes (e.g., by closing digital divides and reducing the stress of insufficient materials).

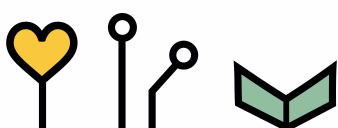
Best Practices and Innovations: Lithuania has several initiatives that, while not all exclusively about well-being, contribute to safer and more supportive digital learning environments:

- **Safer Internet Programme:** Lithuania has been part of the EU's Safer Internet action since 2005. The National Safer Internet Centre project (Draugiškas internetas) ran through multiple phases up to 2020 and continues under the coordination of the Lithuanian non-formal education agency. The project's goal is to make the internet a trusted environment for children and involve youth in creating a safer online space. As part of this, Lithuania offers an Internet hotline for reporting illegal or harmful content (Švarus internetas), educational websites for cybersecurity awareness (e.g. eSaugumas.lt), and various campaigns (like “Strengthen Immunity” against online risks, or “Growing Up on the Internet”). There are also specialised resources, for instance, a platform to develop digital skills (Skaitmeninis IQ) and media literacy



initiatives (Dideli maži ekranai – “Big Small Screens”). These efforts directly address digital well-being by educating children on how to navigate the internet safely and by providing channels to get help when encountering online threats.

- Standards for School Digital Infrastructure:** Lithuania developed a standard for educational provision that includes a list of necessary and complementary tools for a school’s digital infrastructure. By setting a benchmark for what schools should have (devices, networks, software, etc.), it encourages every school to reach a certain level. This reduces inequalities and ensures that no student’s well-being suffers due to lack of basic digital access at school. When all schools are expected to have, say, content filtering, adequate computers, and secure Wi-Fi, it means students across the country have a more consistent, safe digital learning environment.
- eMokykla – Education Portal:** As mentioned, the national education portal (emokykla.lt) hosts a wealth of digital learning resources for teachers and students. This one-stop-shop includes curricula, methodological materials, a catalogue of digital teaching tools, and information on teacher events. Having quality-assured resources accessible to all schools is a best practice in supporting digital well-being: it helps teachers find appropriate content (reducing reliance on potentially unsafe internet searches) and provides engaging materials (like educational games, simulations) that can make learning more interactive and enjoyable. The portal even houses the Planeta tool for lesson planning in various modalities, which supports teachers in orchestrating balanced digital learning experiences.
- School-Level Initiatives:** Some Lithuanian schools have pioneered their own well-being measures. For example, Klaipėda Vyturio Progimnazija established rules on mobile phone use in school, providing a model that presumably inspired the national working group on this issue. Additionally, teachers from a vocational gymnasium in Marijampolė are participating in an international Erasmus+ project “Unplugging for a Brighter Future: Internet and Social Media Addiction,” which aims to improve the digital competences of young people and educators to overcome challenges like online addiction, cyberbullying, and digital discrimination. This project is noteworthy as it directly targets digital well-being issues (addiction, bullying) and seeks to build resilience and awareness among youth. It exemplifies how schools and educators can engage with international research and training to bring back practices to their classrooms (for instance, recognizing signs of problematic internet use and teaching students coping strategies).
- Centre for Digital Ethics:** The non-governmental Centre for Digital Ethics in Lithuania plays a unique role. It actively raises public awareness about technology’s impact, going into schools to meet with students, parents, teachers, and health professionals. It also participates in research on internet usage habits among children and adults. By disseminating findings and best practices, this centre is effectively a think-tank and



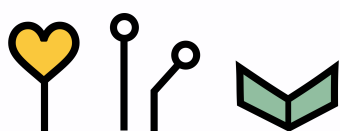
advocacy group for digital well-being. For example, it provided suggestions to both policymakers and schools on the need to regulate digital well-being nationally. It also, in collaboration with a health agency, developed materials for general practitioners and mental health professionals to recognize signs of problematic internet use (including short videos and training material). This cross-sector approach (linking education, health, and digital expertise) is a best practice in itself.

These initiatives, from the Safer Internet Centre to grassroots school projects, form an ecosystem of support for digital well-being in Lithuania. They ensure that beyond the high-level strategies, there are concrete tools, resources, and activities reaching the end-users – students, educators, and families.

4.5 Finland

Finland's digital well-being policies have been broadly adopted at the municipal and school levels, underpinned by the National Core Curriculum for Basic Education 2014 and the subsequent system-wide strategies on digitalisation. Municipal authorities have successfully embedded the curriculum's transversal "ICT competence" and "multiliteracy" elements into local teaching plans, supported by the Finnish Education Evaluation Centre's (FINEEC) positive assessment of the roll-out and by the National Agency for Education's (OPH) ongoing development of digital-competence frameworks for educators. Collectively, these measures have built robust structures for digital well-being in Finnish education, leveraging peer mentoring, technology platforms, evidence-based prevention programmes, and clear curricular mandates. Finland is a pioneer in initiatives that promote students' well-being in digital environments. Some notable examples include:

- **Digitutor Mentor Network:** Expert teachers are funded to coach colleagues in pedagogically sound technology use and in fostering healthy digital practices in classrooms, ensuring that tools serve learners' well-being rather than distract them.
- **DigiOne Service Platform:** Piloted across multiple cities, this unified login system integrates learning analytics, timetabling, and welfare data. It provides real-time alerts on student overload or absenteeism, enabling early pastoral interventions that support both academic progress and digital well-being.
- **KiVa Anti-Bullying Programme:** With over 800 participating schools in Finland, KiVa includes cyberbullying modules and has demonstrably reduced online harassment and related anxiety, embedding a culture of peer support and safety in digital spaces.
- **Media Literacy and "New Literacies" Programmes:** Annual campaigns and a 2020–2023 national project have delivered age-phase descriptors for balanced



screen time, online safety, and media ethics, which schools adopt to maintain consistent well-being standards across regions.

- **“New Literacies” Programme (Uudet lukutaidot 2020–2023):** a government initiative that published age-specific competences for media literacy, ICT, and coding, to be integrated into local curricula. The guidelines include balanced screen time and online safety benchmarks for each age, giving teachers practical tools to foster students' well-being with technology. This has helped reduce inconsistent practices across municipalities.

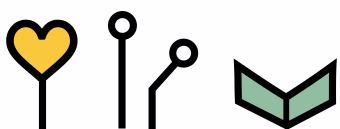
These initiatives, alongside Finland's Framework for Digital Competence 2022 (which guarantees every school teaches e-safety, ergonomics and healthy digital habits in a structured progression), are regarded as best practices in Europe. They demonstrate Finland's proactive, evidence-based approach to digital well-being.

In comparing these, one finds a convergence on certain best practices: for example, Safer Internet Centres operate in every EU country under the BIK initiative, and they all contribute to digital well-being by offering hotlines, resources, and awareness campaigns. What varies is how well their work is integrated into school systems. Malta integrates it strongly (with curriculum ties, etc.), others might treat it more as an external resource. So, one recommendation could be to strengthen links between national Safer Internet Centre activities and school curricula/training in each country, learning from Malta's integrated model.

5. Comparative Analysis of Digital Well-being Challenges

Across Europe, countries have made significant strides in building digital education infrastructure and frameworks, but the integration of digital well-being remains uneven and underdeveloped. While the contexts and levels of digital advancement differ, a number of shared gaps and emerging priorities can be identified.

A recurring issue across all five countries is the **absence of robust monitoring and evaluation systems**. None of the systems currently track digital well-being in a comprehensive way. Data is often limited to access and usage metrics, such as the number of devices distributed or connectivity levels, without capturing indicators like screen time, cyberbullying prevalence, mental health impacts, or levels of student engagement. This lack of evidence limits the



ability to evaluate the effectiveness of existing policies or to design targeted interventions. Right now, each country is grappling with how to measure success in this domain. For example, eSafety Label certification (adopted by Malta, and some schools in Spain, etc.) provides one benchmark for school-wide digital safety practices. There could be others, like auditing the presence of digital well-being topics in school improvement plans, or tracking usage of helplines and resolution of incidents. The lack of data is itself a finding: it underscores that digital well-being, as a policy area, is still maturing. To move from anecdotal or perceived issues to targeted interventions, countries will need to invest in research and evaluation. Encouragingly, research networks (like EU Kids Online, which includes these countries) and EU-level studies (like the JRC study) are generating comparable data. Nationally, governments might incorporate relevant questions into existing surveys (Spain's periodic school climate surveys, Estonia's student surveys, etc.) to build a baseline. In effect, all countries share this gap, and cooperative efforts (perhaps through the European School Survey Project on ICT in Education – ESSIE or similar) could fill it.

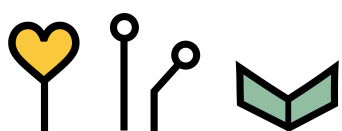
Another shared challenge is the **narrow scope of teacher training**. While significant efforts have been made to upskill educators in technical competences, training rarely extends to pedagogical strategies for well-being. Teachers are often left without practical guidance on managing issues such as digital fatigue, distraction, online safety, or the social-emotional dimensions of technology use. This gap also contributes to uneven classroom practices, where technology may be used superficially rather than as a tool for student-centred, well-being-oriented learning.

Similarly, **mental health and digital balance remain under-addressed** in policy and practice. Issues such as screen overuse, digital addiction, and stress from constant connectivity are widely acknowledged but not systematically integrated into national strategies. Most countries mention well-being as a peripheral concern, without embedding it into curriculum standards, teacher training modules, or school-level operational frameworks.

In the following paragraphs we discuss digital well-being challenges in Spain, Estonia, Lithuania, Malta and Finland.

5.1 Spain

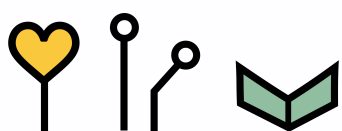
Spain has made progress in rolling out its digital education initiatives, but challenges remain in translating policy into practice, especially regarding well-being. The Digital Education Plan led to the creation of thousands of Digital School Plans at the local level, providing schools with devices and teacher training aligned to the MRCDD framework (2022). However, effective pedagogical integration of these digital tools and attention to digital well-being has



been limited and uneven (García-Luque, 2023). While infrastructure and formal frameworks are in place, many schools struggle with implementation. Key challenges identified include:

- **Territorial Inequalities:** There is a significant digital divide between different regions and communities. Some schools (often in wealthier or urban areas) have better connectivity and resources than others. These disparities extend to teacher training opportunities as well. Thus, students' digital learning conditions can depend on their location, undermining equity.
- **Insufficient Teacher Training and Support:** Teachers have the MRCDD framework and are encouraged to improve their digital skills, but many lack specific training on how to promote healthy, critical, and safe technology use in the classroom. Professional development tends to focus on technical skills rather than pedagogical strategies for digital well-being. Educators need more support to confidently manage issues like student screen time, cyberbullying, or digital distraction.
- **Limited Pedagogical Integration:** Technology is often introduced as an add-on tool without fundamentally changing teaching methods. In many cases, digital tools are used to do old things in new ways (e.g. digitizing worksheets) rather than to enable student-centred, well-being-oriented practices. This can lead to superficial use of tech that doesn't necessarily improve learning or reduce student stress.
- **Lack of Clear Indicators and Monitoring:** Spain currently has no system to measure the impact of digital policies on student or teacher well-being. For instance, schools report on digital device counts and internet speeds, but there are no nationwide metrics for things like students' screen time in school, incidents of cyberbullying, or student engagement and mental health related to ICT usage. The absence of data makes it hard to enforce policies or identify where interventions are needed.
- **Limited Student Voice:** Despite students being the primary users of educational technology, their perspectives are rarely included in policy design or implementation. Students have little say in how digital tools are used in their schools. This can result in policies that overlook student experience – for example, rules that are either too restrictive or too lax in ways that don't align with students' actual needs for support in navigating digital life.

These challenges indicate that while Spain has robust strategies on paper, there is a gap in realising the full potential of digital well-being policies on the ground. The focus to date has been heavier on access and skills (the “digital transformation” aspect) than on well-being as a transversal element of that transformation. Well-being in Spain's current policies is often treated as a marginal or assumed outcome, rather than a concrete objective with dedicated actions. Issues like mental health, digital fatigue, or healthy screen habits are not yet systematically addressed; they tend to be mentioned in passing if at all.



There are several areas where current policies fall short and further development is needed:

- Shift to **pedagogy-first policies** where technology supports explicit educational and well-being goals.
- **Make digital well-being a transversal theme**, integrated into curricula, standards, and teacher training.
- **Establish monitoring and evaluation systems** with clear indicators for well-being.
- Promote **student participation** in shaping policies and practices.

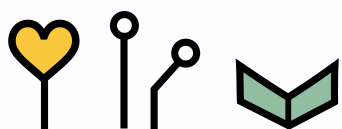
In summary, Spain is at a stage where the digital infrastructure and basic frameworks are largely in place, but there is an acute need to enrich these policies with a focus on well-being and to support their implementation with training, resources, and monitoring.

5.2 Estonia

Estonia, a leader in digitalisation, now faces second-order challenges, ensuring that high digital access translates into balanced and healthy usage. The Digiefekt study in Estonia examined how digital technologies influence learning outcomes and student engagement in 3rd, 6th, and 9th grades (Education Estonia, n.d.). It found that constructive use of digital tools (where students actively create and interact) leads to improved learning outcomes, whereas passive use (simply replacing traditional tools with digital ones without interactivity) doesn't significantly improve performance. It also noted that students using diverse learning strategies (combining text, multimedia, etc.) achieved better results. These findings translate into well-being recommendations: they suggest that to keep students motivated and reduce negative experiences, teachers should focus on active and varied digital learning methods, not just digitise worksheets. The study recommended revising teacher training programmes to emphasise effective digital pedagogies and to better utilise data for informing policy. All this points to a challenge: teachers need higher-order digital teaching skills and support to maximise benefits and minimise downsides of tech use.

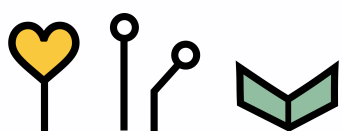
Major challenges and gaps for Estonia have been identified:

- **Explicit Definition of Digital Well-being:** As of now, "digital well-being" isn't clearly defined or consistently used in Estonia's education discourse; often the focus is narrowed to cybersecurity or digital skills. The Human Development Report notes the term needs to be extended to include psychological, social, and mental dimensions. In practice, this means teachers, parents, and even students might not have a shared understanding of what healthy digital habits look like, beyond avoiding obvious dangers. Policies may need to coin a local term or framework for digital well-being to ensure it gets systematic attention.



- **Metrics and Monitoring:** There are few metrics developed to assess digital well-being in education. Estonia 2035 has no explicit indicators for digital well-being progress. As a result, it's challenging to know how big issues like digital stress or tech-related mental health problems are, or whether they're improving or worsening. Without data (like regular student well-being surveys with digital-specific questions), policymakers are somewhat "flying blind" on this issue.
- **Teacher Training Gaps:** While Estonian teachers are generally tech-savvy, training programmes have room to grow in addressing beyond-digital-skills competencies. The Digiefekt study recommended more focus on digital pedagogical strategies in teacher education. Teachers also need preparation to observe and manage students' emotional states in digital settings – for example, recognising when a student is disengaged or stressed during online learning. Presently, pedagogical universities may not emphasise those aspects, focusing more on using tools than on managing their impacts.
- **Regional Disparities:** Though Estonia is small, there are still regional disparities in digital competencies and infrastructure among teachers and students. Urban schools might have tech experts and a culture of innovation, while some rural schools have older teachers less comfortable with digital methods, and possibly slightly less robust internet. Such disparities mean not every student is benefiting equally from Estonia's digital strengths. This can reflect in well-being if, say, a rural student has fewer digital opportunities and feels less prepared or a teacher there cannot help with certain online issues due to lack of training.
- **Cybersecurity and Geopolitical Risks:** Estonia, being highly digital, faces increasing cyber threats (including geopolitical ones). The education sector is not immune – a rise in cybercrime or potential cyber warfare (e.g., attacks on school systems or misinformation campaigns targeting youth) poses a risk to digital well-being. Also, the basic abilities of some institutions to organise proper cybersecurity might lag behind the threats. The stress on IT systems can translate into stress on users if, for example, a school's system is hacked or student data is leaked. Keeping digital learning spaces safe and functional is paramount for trust and well-being.

In summary, Estonia's context is that of a digitally advanced system now grappling with the second-order effects of digitalisation, ensuring that it actually enhances well-being rather than undermines it. The awareness of these issues is rising, as evidenced by new research and policy discussions, but concrete education policy adjustments (curriculum changes, teacher training revamps, student support mechanisms) are still catching up.

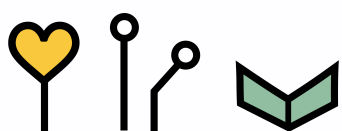


5.3 Malta

Malta's relatively small system may struggle with limited specialised personnel. For instance, a limited number of expert child psychologists or IT safety officers serving all schools. Scaling training and support in digital well-being might require creative solutions (like online training modules or sharing specialists between schools). Another challenge is keeping pace with technology. As Malta pushes forward on digital education (coding in schools, more devices, etc.), ensuring the simultaneous rollout of well-being measures is crucial. The strategy through 2030 aims to do this, but implementation will need continuous vigilance. Maltese students have high rates of internet and social media use (thanks to widespread English fluency and connectivity); thus, issues of screen overuse and exposure to online risks are very real. Engaging parents and the community in guiding healthy tech habits will be essential, as purely school-based actions have limits. Malta has begun doing this (e.g., parent info sessions on e-safety), but more could be done to make digital well-being a whole-community effort. Lastly, evaluation will be key here as well, Malta should collect data on student well-being indicators (perhaps through surveys or well-being indexes in schools) to inform policy adjustments. Currently, such data is not systematically gathered, which is a gap shared by others and noted at the EU level.

Even with Malta's strong performance, national evaluations have identified several gaps that need attention:

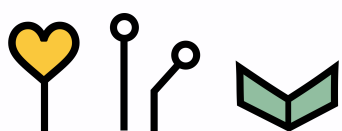
- **Outcome Monitoring and Research:** While Malta tracks access metrics (like how many devices delivered, broadband coverage, etc.) very well, it has limited systematic data on the outcomes of these initiatives in terms of well-being. For example, do students with tablets perform better academically? Has cyberbullying in schools decreased since implementing eSafety measures? Are students' stress levels or screen time habits shifting? There isn't a comprehensive longitudinal dataset to answer such questions. The need is for more evidence-based assessment of digital well-being impacts on student mental health, academic performance, and social development. This could involve regular national surveys of student well-being or incorporating well-being indicators into school inspection frameworks.
- **Screen Time Guidelines:** Malta noted that its policies lack detailed, age-specific screen time recommendations. Teachers and parents do not have official guidance on how long, say, a 7-year-old vs. a 14-year-old should ideally be on screens for educational (or non-educational) purposes. Without clear guidelines, it's challenging to manage device use uniformly. Developing such guidelines (perhaps akin to paediatric associations' recommendations, but tailored to school contexts) is a gap



to fill, to ensure students' physical health (vision, posture, sleep) and attention spans are safeguarded.

- **Teacher Workload and Well-being:** Digital transformation has added responsibilities for teachers—managing online classrooms, using new tools, extra communication channels with students/parents, etc. Malta found that there were no clear policies for workload management in this regard. Teachers risk burnout if expected to seamlessly integrate technology without adjustments to their schedules or duties. Structured support (like providing in-school ICT coordinators to assist teachers, or allocating time for digital content preparation) and workload rebalancing are needed. Ensuring educator well-being is a part of digital well-being policy (since teachers who are overworked will struggle to support students).
- **AI and Algorithmic Transparency:** Malta identified that its current educational guidelines have limited references to the use of artificial intelligence or algorithmic decision-making in education. With AI-based learning tools on the rise, there is a need for policy on ensuring these tools are transparent, fair, and aligned with ethical standards. For instance, if a school uses an AI tutoring system, how do we make sure it doesn't inadvertently disadvantage some students or violate privacy? Malta sees this as a gap – developing an AI in education framework that covers bias detection, data protection, and clarity on how algorithms make decisions (particularly relevant if algorithms will influence student grades or content exposure).
- **Long-term Physical Health Impact:** An area that often gets overlooked, but Malta flagged, is the physical health effects of increased device use—like eye strain, poor posture, and sleep disruption due to late-night screen exposure. There haven't been comprehensive policies or studies on these in Malta's context. Addressing this might involve collaboration between the education and health ministries to set ergonomic standards (e.g., proper furniture for device usage in schools), encourage screen breaks and outdoor time, and perhaps incorporate eye health check-ups or exercises in school routines.
- **Ensuring Consistent Quality Across Regions:** Although Malta is small, they noted some rural-urban variations in how well policies are implemented. Perhaps smaller, more remote schools have less access to expert training or have older infrastructure issues (though connectivity is nationwide, quality of implementation might differ). The challenge is providing targeted support to schools that might be struggling—be it additional funding, specialist visits, or community partnerships—so that every student, regardless of attending a school on Malta's main island or Gozo, benefits equally from digital well-being measures.

Overall, Malta's example demonstrates that even with near-ideal infrastructure and comprehensive planning, continuous improvement is needed to address evolving challenges like managing screen time and integrating new technologies ethically. Importantly, Malta



sees itself (and is seen by others) as a potential leader and model in this domain. For instance, suggestions have been made for Malta to act as a pilot country for new EU-wide digital well-being initiatives, given its success with universal device provision and multi-stakeholder coordination.

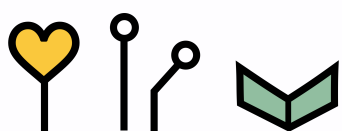
5.4 Lithuania

Lithuania has made substantial progress in digital infrastructure and teacher training through initiatives like EdTech but lacks a coherent national approach to digital well-being. Analyses reveal a critical point: digital well-being is not yet regulated or systematically addressed at the national level in Lithuania. Successful measures exist for infrastructure and skills, but ensuring well-being (safe, balanced, healthy use of tech) relies largely on individual schools.

Furthermore, inefficient use of digital education is still seen as an issue, implying that simply providing tech hasn't solved all pedagogical challenges. The Ministry's recent discussion paper "Digital Education in Lithuania: material for discussion" (2023) explicitly identifies risks associated with digital education: lower student achievement, reduced motivation, poor concentration, the digital divide, neglect of special needs, data security issues, and cyber-attacks. Crucially, it notes the greatest risks for pupils are related to their physical and psychological health and loss of social skills. This indicates that policymakers are aware that increased screen time and online learning can lead to problems like worsened eyesight, sedentary lifestyle, anxiety, and diminished face-to-face socialisation. There is also mention of teacher resistance to new digital practices, which can be a barrier to implementing changes aimed at improving student well-being (if teachers are not on board, initiatives like digital wellness guidelines won't be enforced in classrooms).

We have identified several challenges for improving digital well-being policy in Lithuania:

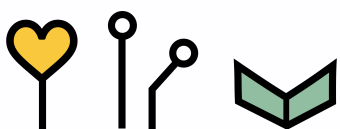
- **National Policy Focus on Digital Well-being:** While digital education as a whole is strategically driven, the absence of explicit regulation or guidance on digital well-being is a major gap. Essentially, a lot is happening (infrastructure, training, content development) but these programmes are not analysed or designed through a "well-being lens". The consensus is that digital well-being should be more formally integrated into national education policy. This could mean issuing national guidelines for healthy use of technology in schools (e.g., screen time recommendations, as Malta has identified, or psycho-social support frameworks) and potentially updating curriculum standards to include digital well-being education. First steps have already been taken, but further development is necessary.
- **Sustaining Ongoing Initiatives:** The research notes that many projects run by the Ministry (like those under EdTech or inclusion initiatives) are still in progress and their



final results unknown. There is a need to ensure these projects are not only completed but also evaluated for their impact on well-being and then institutionalised if effective. For instance, if a pilot digital tool reduces student anxiety in learning, it should be scaled up; if not, alternative solutions should be sought. Purposeful use of technologies should also be better addressed by research in teacher training and development of teacher digital competences across the country in a more concise way, following DigCompEdu framework.

- **Systematic Approach and Coherence:** In the absence of a systematic national approach to digital well-being, schools do their own thing. This can lead to fragmented practices and possibly inconsistencies in student experiences. A student in one school might benefit from strict but supportive device rules and get lessons on digital citizenship, while another school might have no such rules and leave students to fend for themselves online. The clear need is for a coherent national approach that still allows local flexibility but sets minimum standards for protecting and promoting well-being (like requiring every school to have an internet safety policy, as is done for physical safety policies).
- **Efficiency and Effectiveness of Digital Education:** Despite improvements, there is a sense that the full efficiency promised by digital education hasn't been realised yet. This could mean that while devices are present, they might not be utilised optimally, or that learning outcomes haven't significantly improved. The implication for well-being is that if digital tools aren't actually making learning better or easier, they could be causing unnecessary stress or distraction. Thus, efforts must continue to figure out what works best in digital education (e.g., which methods improve engagement without causing cognitive overload) and promote those methods.
- **Emerging Risks and Resistance:** The identification of major risks like reduced social skills and emotional problems due to digital overuse points to areas needing more attention. Interventions around moderation of device use, encouraging face-to-face interaction, and balancing digital and analogue activities in school are needed. Additionally, teacher resistance to new practices indicates a need for change management and more support for teachers – if teachers fear or distrust technology, they may not implement the very measures (like new pedagogies or digital wellness practices) that policies propose.

In conclusion, Lithuania has laid a strong foundation in digital education and recognises many of the challenges pertinent to digital well-being. The country is at a juncture where it can build on its digital infrastructure successes by introducing targeted well-being policies, making the “digital transformation” truly human-centric. The recommendations put forth by Lithuanian experts echo this, calling for formal recognition of digital well-being in the national legal framework and more systematic support for it.



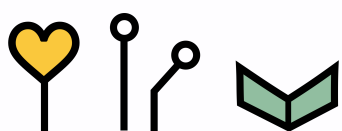
5.5 Finland

Finland, often considered a pioneer, also faces challenges ensuring that digital transformation aligns with well-being.

- **Indicators and baselines:** There is no unified set of indicators to measure students' digital well-being (e.g. no national tracking of screen time, cyberbullying prevalence, sleep impacts). This makes it hard to set targets or evaluate policies' impact.
- **Municipal disparity:** local autonomy means some schools excel in digital wellness (1:1 devices with clear rules) while others have patchy measures, creating inequitable student experiences.
- **Teacher CPD capacity:** Teachers' continuous professional development (CPD) remains a bottleneck: expectations for teaching new topics (coding, AI ethics, media-health) have grown, but training days and budgets have not, leading to teacher stress and inconsistent implementation of well-being aims.
- **Infrastructure equity:** Pockets of limited high-speed connectivity remain, especially in rural areas. Such connectivity gaps directly translate to unequal opportunities for safe and meaningful digital practice.
- **Welfare integration:** Stakeholders note a silo between digital policy and mental health services e.g., pupil welfare teams report rising issues like screen overuse or online anxiety, but lack integrated e-health tools and data links to address them holistically.

These gaps highlight the need for better coordination and resourcing, which Finland is now working to address through its new policies (e.g., the forthcoming indicator framework in the Digitalisation 2027 plan and proposed national minimum standards for schools' digital environments).

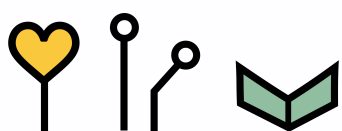
Key gaps such as monitoring, teacher workload, and explicit well-being integration are common. The following section will synthesise these findings into recommendations that aim to close gaps and reinforce successful strategies, targeting both national policy improvements and opportunities for EU-level support and alignment.



6. Recommendations for Policy Improvement

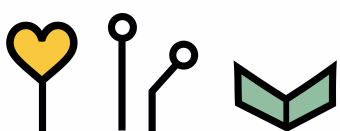
Drawing on the analysis of European and national policies as well as the connections to research and best practices, we propose the following recommendations to strengthen digital well-being in education. These recommendations are intended for policymakers at the national and EU levels, and they emphasise actions that are evidence-based and collaboratively achievable:

- **Make Digital Well-being an Explicit Policy Priority at the National Levels:** Governments should formally embed explicitly digital well-being objectives in education strategies and standards. Rather than treating it implicitly, policy documents should define digital well-being (covering safe, ethical, and healthy technology use) and set targets for it. For example, Spain could update its Digital Education Plan to include specific well-being goals (e.g., reducing cyberbullying incidents or improving student self-reported wellness), ensuring a transversal focus rather than a peripheral one. Finland could also strengthen its *Policies for the Digitalisation of Education and Training until 2027* by making digital well-being a strategic pillar with measurable outcomes such as reducing student digital stress and expanding whole-school well-being plans. Estonia is recommended to establish a special task force horizontally to support digital well-being in schools and elsewhere. This clarity will drive schools to treat well-being with the same importance as digital skills or academic performance.
- **Develop National and EU Level Indicators and Monitoring Systems of digital well-being:** Countries need to establish systematic data collection on digital well-being to inform individual stakeholders and policy-makers. This might include annual surveys on so-called risk factors such as students' screen time, incidence of online safety issues in schools, student engagement levels, and mental health indicators related to digital use. Also different stakeholders as Schools, teachers, students and parents should be involved in the data collection to ensure validity of the measurements. For instance, Lithuania could expand its Education Management Information System to track digital well-being metrics in each school (such as reports of internet overuse symptoms or the presence of school digital well-being policies). Similarly, Finland could integrate digital well-being indicators into FINEEC annual evaluations to enable targeted interventions and EU-level benchmarking. Creating dashboards or indices for digital well-being (similar to how academic achievement is tracked) will enable targeted interventions and accountability. At the EU level, the European Commission could support this by coordinating a common framework of



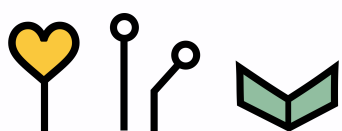
indicators and encouraging countries to include modules on digital well-being in existing studies (e.g., PISA, HBSC surveys).

- **Enhance Teacher Training Programmes with Well-being Competencies:** All teacher professional development should include training on managing digital tools in pedagogically and emotionally sound ways. This goes beyond ICT proficiency to cover topics like identifying students' digital stress, promoting positive online behaviour, and balancing online/offline activities in class. Teachers should learn strategies for guiding students in critical thinking about technology use, as well as protecting their own well-being (e.g., handling the always-on pressure of digital communication). National education institutes should update teacher qualification standards to include digital competences, as well as well-being competencies. For example, Estonia's teacher training programmes could incorporate modules on digital well-being and socio-emotional learning in digital contexts, as recommended by recent research. In Finland, the Digitutor network could be expanded into a competence hub that equips mentor teachers to support colleagues in designing mindful digital practices, balanced pedagogies, and socio-emotional strategies as a standard part of teacher training. Additionally, ongoing support frameworks like peer mentoring, communities of practice (online forums for teachers to share experiences), and school-based digital well-being champions can help sustain and spread good practices.
- **Support Teacher Well-being and Manage Workload:** Education authorities must recognise that digitally transforming education can increase teachers' and school staff's workloads and stress. Policies should be introduced to safeguard educator well-being amid these changes. This can include providing extra preparation time for teachers to develop digital materials, hiring technology enhanced learning and teaching support staff in schools, and establishing clear guidelines on how to measure and support teacher digital well-being, and how to set the limits to their availability face to face and online. Structured support might involve, for example, teacher workload policies (e.g. Malta refining its teacher workload policies so that digital initiatives come with allocated hours or incentives, as the country identified this gap). In Spain, when teachers felt burdened by new digital tools without methodological support, the government established funding lines for schools to release teachers for digital competence development or well-being training. A healthy teacher is essential for a healthy classroom; thus, educator well-being should be measured (e.g., through regular surveys) and considered as an integral part of digital education plans.
- **Prioritise Equal Access and Reduce Digital Gaps:** Continue and expand efforts to close remaining digital divides, as equity is a precondition for digital well-being. This includes infrastructure investments in high-speed internet for all schools and communities, device accessibility for all students (through one-to-one programmes or



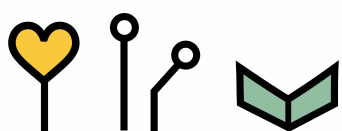
lending schemes), and assistive technologies for students with disabilities. For countries like Spain, Lithuania and also Estonia that still report regional or socio-economic disparities, targeted initiatives (perhaps funded by EU cohesion funds) should provide extra support to lagging regions, whether it be upgrading rural broadband, equipping small schools with tech labs, or special training for teachers in underserved areas. Reducing these gaps not only improves learning outcomes but also alleviates the psychosocial stress students face when they lack resources their peers have (feelings of exclusion, inability to complete digital assignments, etc.). Moreover, continuous monitoring and evaluation should ensure that access initiatives actually translate to usage and benefits. Strengthening monitoring and evaluation systems for digital education, with integrated wellbeing indicators, is also crucial to reducing digital gaps.

- **Integrate Mental Health Support with Digital Education:** Ministries of Education should work closely with Ministries of Health (and/or youth services) to embed mental health and wellness supports into the digital education ecosystem. Concrete steps include: training school counselors and psychologists specifically in issues of digital addiction, cyberbullying trauma, and screen overuse; providing clear referral pathways for students showing signs of digital-related mental distress; and continuing public awareness campaigns about balanced digital habits. Countries could establish or expand national helplines dedicated to youth mental health (following Malta's 1579 model) and ensure they coordinate with schools.
- **Curricular efforts like mindfulness, time management skills, and social-emotional learning should explicitly reference digital contexts** e.g., discussing how social media affects self-esteem, or practicing techniques to disconnect and relax. Lithuania's acknowledgment of issues like loss of social skills and psychological risks should translate into action: possibly introducing a required component in health or civic education classes that covers digital well-being and mental health coping strategies. On the EU level, projects like the new EU Mental Health Strategy (2023) can be linked with digital education, funding initiatives that address the digital dimension of youth mental health. These initiatives should be addressed first in teacher training (primary and continuous), and then integrated in school curricula, information training opportunities for parents, school administration, and other stakeholders and members of school communities.
- **Establish Age-Appropriate Guidelines for Digital Use:** National education authorities, in collaboration with health experts and researchers, should focus more on relevant, up-to-date research and publish clear, evidence-based guidelines on healthy device use for different age groups in educational settings. These guidelines might cover recommended maximum screen time during school hours and homework, appropriate breaks of screen use, ergonomics including proper posture and furniture,



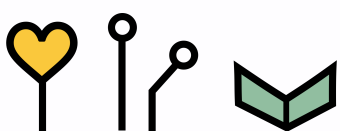
and recommended types of digital activities by age. Having an official reference, schools and parents can align expectations and rules more effectively. For example, Malta, which identified the absence of such guidelines as a policy gap, could lead the way in formulating them with input from paediatricians, child development specialists, and education researchers. Spain and Estonia, where some schools have instituted phone bans or structured device-use policies, could also build on research. To remain relevant, these guidelines should be regularly reviewed and updated as technologies and evidence evolve, incorporating findings on issues such as blue light and sleep disruption or the psychological impacts of AI-driven platforms. This requires sustained funding for longitudinal and applied research on the effects of digital technology use in schools, ensuring that recommendations are continuously refined in line with emerging evidence and are disseminated in user-friendly formats such as posters, infographics, and classroom checklists to support consistent adoption in educational environments.

- **Foster Cross-Sector Collaboration and Multi-Stakeholder Initiatives:** Digital well-being in education intersects with technology, health, child protection, and community issues. Thus, a multi-stakeholder approach is essential. Governments should strengthen or establish digital well-being initiatives that would unite and could be integrated into multiple existing coalitions, like Safer Internet Centres that bring together education authorities, social services, law enforcement, NGOs, parent associations, and even student representatives. These coalitions can join and participate in much more comprehensive campaigns (for example, a nationwide “Digital Wellness Week” involving school activities, parent workshops, and media outreach) and ensure consistent messaging involving interdisciplinary research teams and stakeholder organizations. The Maltese BeSmartOnline! model is a powerful example to emulate. Similarly, Lithuania's Centre for Digital Ethics working with health institutions shows the value of cross-sector expertise. On a school level, implementing a whole-school approach to digital well-being is recommended: engage leadership, teachers of all subjects, IT staff, school nurses, and student councils in creating the school's digital policies and practices. The EU, through Erasmus+ and Horizon Europe funding, can encourage cross-sector pilot projects (e.g., partnerships between universities, EdTech companies, and schools to design tools that promote well-being, or twin school projects across countries focusing on digital citizenship and well-being). By breaking silos, we ensure that policies are informed by diverse perspectives and that support networks exist around students. Schools across Europe should be encouraged by national policy makers and researchers to join the European Digital Education Hub (EDEH) community and become active participants and enthusiasts in creating European Digital Education Well-being practices and bringing them down to their countries and schools. National and international associations of digital education are



also strong reference points for their legacy established in research and practice, uniting and working with international experts in digital education.

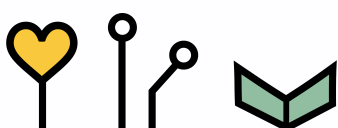
- **Empower Student Participation and Active Citizenship:** Students should be seen not just as beneficiaries but as active contributors to shaping a healthy digital environment in their schools. Policymakers and schools are advised to involve students in policy design and implementation. For example, through student digital councils or feedback mechanisms. As seen in Spain, giving students a voice (a “manifesto” on their digital education concerns) brought forward insights, adults might overlook. Schools could establish student committees that work with teachers to draft acceptable use policies or plan awareness activities (peer-led assemblies on cyberbullying, etc.). This not only improves the relevance of policies but also educates the students in participatory citizenship. Additionally, integrating digital citizenship education thoroughly in curricula is vital: beyond technical skills, students should learn about empathy online, respect for others (to combat online hate), understanding media and misinformation, and knowing their digital rights and responsibilities. A digitally well citizen is an informed and responsible one thus, curricula should treat these as core competencies. The European Digital Citizenship Education framework by the Council of Europe could guide national curricula revisions. By empowering students, policies will likely have greater impact and uptake.
- **Ensure Ethical and Safe Use of Emerging Technologies (AI, Data Analytics) in Education:** As schools adopt AI-driven tools and data analytics (for personalized learning, administration, etc.), strong governance frameworks are needed to prevent harm and build trust. Policymakers should develop guidelines on the ethical use of AI in schools, covering algorithmic transparency, bias mitigation, data privacy, and accountability when AI is used for assessments or recommendations. For instance, if a learning platform uses AI to recommend learning paths, schools should be aware of how those recommendations are made and have the ability to intervene. National regulations might require EdTech providers to disclose AI decision criteria or adhere to standards (much like GDPR did for data). Students and parents also need to be informed (in age-appropriate terms) when AI is being used in educational tools and what that means for their data and choices. Additionally, cybersecurity protocols must be updated continuously – ministries should support schools to implement measures against cyber threats (regular audits, updated filters, incident response plans) to ensure that digital learning environments are safe from intrusion or harmful content. Given Estonia's note on rising cyber-risks, sharing best practices in cybersecurity for schools across Europe is timely. The President of Estonia has initiated a brand-new AI Leap, which could be closely integrated with international initiatives or bilateral collaborations between EU countries. In Finland, the *DigiOne* platform could be enhanced with a well-being analytics module that provides early-warning



alerts for digital overload or peer isolation, ensuring data-driven interventions are paired with strict privacy safeguards, setting an example of ethical and human-centred governance. The EU's upcoming AI Act and existing GDPR provide the broader legal backdrop, but education-specific guidelines (perhaps via a working group of the European Education Area) would help nations implement these in school contexts.

- **Leverage EU-wide Cooperation and Funding for Alignment and Innovation:** Finally, countries should actively utilise European cooperation to boost their digital well-being policies. The EU's Digital Education Action Plan already fosters exchange – this can be amplified by including well-being explicitly in its scope. For example, an EU working group on digital well-being in schools could be convened to allow Spain, Lithuania, Estonia, Malta, and others to share experiences and resources (like curriculum materials or training modules). On alignment: Lithuania observed that its guidelines align with the EU Digital Education Action Plan and saw potential to further integrate with EU strategies. Building on this, national policymakers should strive to align their actions with EU initiatives like BIK+ (Better Internet for Kids) and the upcoming European Digital Skills Certificate – this ensures consistency and opens up funding avenues. EU funds (Erasmus+, Horizon Europe, Digital Europe, structural funds) should be tapped to support research and pilot projects on digital well-being (such as longitudinal studies on the impact of 1:1 devices on student well-being, or pilots of new screen time management tools in schools). Malta's suggestion to position itself as a contributor to BIK+ evolution and even pilot new EU initiatives is a savvy approach. All countries can benefit by either piloting or adopting proven innovations from neighbours. For instance, a successful initiative in one country (like Estonia's Digital Quality Label or Malta's parenting sessions) could be trialled in another through EU project partnerships.

In implementing these recommendations, it's essential to maintain an evidence-based and inclusive approach. Policymakers should continuously consult with stakeholders – teachers' unions, student groups, parent associations, EdTech providers, and mental health professionals – to refine actions. As the digital environment evolves (with new apps, platforms, and even crises like pandemics), policies must be agile. The recommendations above aim to create resilient strategies that can adapt and keep student and teacher well-being at the centre of digital education.



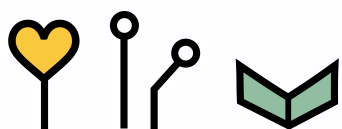
Conclusion

The analysis of European and national policies on digital well-being in education reveals a landscape in transformation. Across Europe, education systems are embracing digital innovation, and with that comes both tremendous opportunities and pressing challenges for well-being. Countries like Malta demonstrate that a cohesive, well-resourced strategy can yield near-universal access to technology and robust support systems, significantly mitigating traditional digital risks. Others, like Spain, Lithuania, and Estonia show how progress in infrastructure and digital skills must be matched by deeper integration of well-being considerations – from classroom practices to national monitoring – to truly benefit learners and educators.

A few **key themes** emerge. **First, digital well-being is multifaceted:** it encompasses equitable access, digital competences, online safety, mental and physical health, data privacy, and ethical technology use. Effective policy must address all these dimensions, rather than single aspects in isolation. **Second, the human element – teachers, students, parents – is at the heart of digital well-being.** Investments in devices and software need to be complemented by investments in people: training, support, and empowerment of users. **Third, gaps remain between policy intent and on-the-ground reality.** Many schools need more guidance and resources to implement healthy digital practices. Students in different regions or socio-economic contexts still experience very different digital learning conditions. And mental health support related to digital issues is only beginning to be systematically developed in most places.

There are also clear **opportunities. International cooperation and the sharing of best practices** can accelerate improvements. For example, if every country adopted a peer-reviewed programme like the Safer Internet Centre model or eSafety Label certification, baseline standards of safety could quickly rise. Emerging research, including the EU's own studies, are providing frameworks and evidence that policymakers can use to justify and design interventions (such as frameworks for whole-school well-being or evidence on how pedagogy affects digital stress, as well as the models of digitally competent school, digitally competent student and others). Moreover, the COVID-19 pandemic – while it strained systems – also raised public awareness about the importance of balanced digital habits and likely created more demand for solutions to issues like screen overload or digital exclusion. Policymakers now have more societal support to enact bold measures in this area.

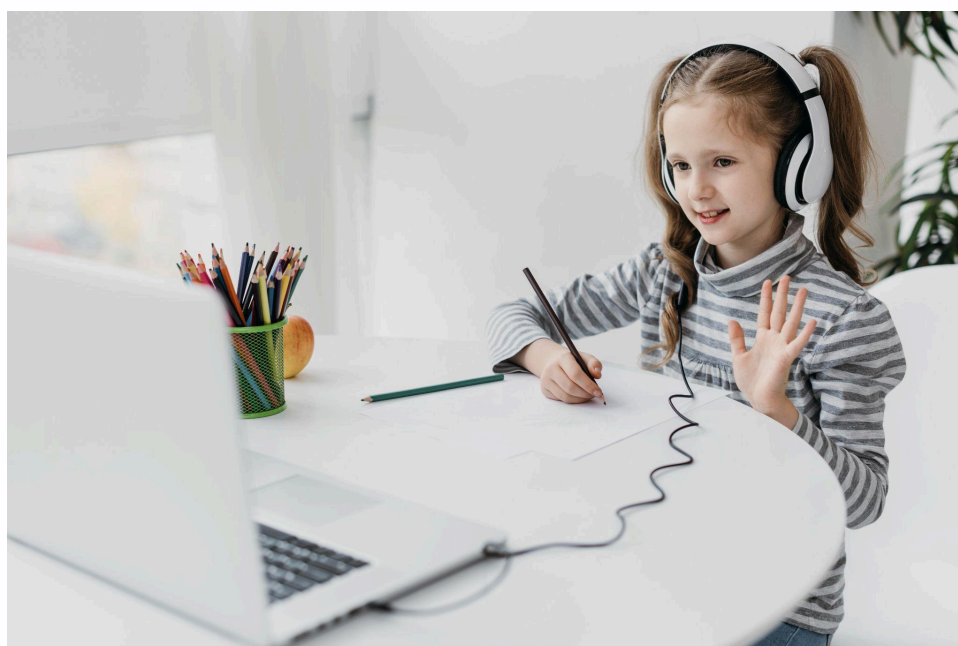
For policymakers and educators reading this report, a few concrete best practices are worth reiterating: involve students in creating a positive digital culture at school; provide structured training and time for teachers to adapt to digital methods; engage parents through



education and transparent communication; and utilize multi-disciplinary expertise when crafting policies (education, psychology, IT, law enforcement). Meanwhile, tracking progress and adjusting course based on data will ensure that efforts actually translate to improved well-being indicators, be it reduced cyberbullying rates, better student focus in digital tasks, or higher teacher satisfaction in technology-rich classrooms.

In the long term, the goal should be to create an educational environment where technology empowers learning without compromising well-being – where every student can benefit from digital resources safely, responsibly, and healthily, and every teacher can leverage technology confidently and sustainably. The new educational technologies should prioritise human beings. Achieving this will inform the resilience and quality of education in the digital age. As one Council of the EU document eloquently suggested, we must harness technology's potential to empower learners and educators, while systematically addressing its risks including personal sustainability and well-being. By implementing the recommendations and fostering ongoing collaboration, European countries can move towards a future in which digital education and well-being go hand in hand.

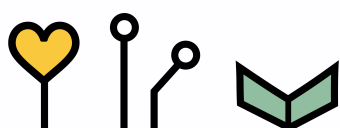
Digital wellbeing policy is an evolving journey: it demands continuous data-driven refinement, cross-sector collaboration, and genuine learner and educator empowerment to keep pace with emerging technologies.



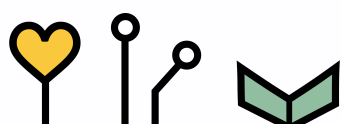
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Annex 1. List of analysed policy documents

Country/ Level	Document Title	Document Type	Year
EU	Council Conclusions on Supporting Well-Being in Digital Education	Policy Guidance	2022
EU	Digital Education Action Plan 2021–2027	Strategic Framework	2020
EU	Better Internet for Kids (BIK+) Strategy	Strategy	2022
EU	General Data Protection Regulation (Regulation (EU) 2016/679) & National Adaptations (e.g., Malta's Data Protection Act)	Regulation	2018
EU	EU Declaration on Digital Rights and Principles	Policy Guidance	2022
Finland	National Core Curriculum for Basic Education 2014	Policy (Curriculum)	2014
Finland	Policies for the Digitalisation of Education and Training until 2027	Strategy	2023
Finland	Digital Compass 2030	Strategy	2023
Finland	Framework for Digitalisation in ECEC, Basic & Adult Education 2022–2030	Framework	2022
Estonia	"Estonia 2035"	Strategy	2022
Estonia	Education Strategy 2021–2035	Strategy	2021
Estonia	Research, Development, Innovation and Entrepreneurship (RDIE) Strategy 2021–2035	Strategy	2021
Estonia	Estonian Digital Society 2030	Strategy	2021
Estonia	Youth Sector Development Plan 2021–2035	Strategy	2021
Estonia	EdTech Estonia Strategy 2023–2027	Strategy	2022
Estonia	Public Information Act (2025); Higher Education Act (2024); Organisation of Research and Development Act (2019), Adult Education Act (2025)	Legislation	2019
Spain	Plan de Educación Digital (Digital Education Plan 2021–2026)	Strategic Plan	2021
Spain	Marco de Referencia de la Competencia Digital Docente (MRCDD)	Framework	2022
Spain	Students' Digital Competence Framework	Framework	2022
Spain	Competències digitals de l'alumnat (Catalonia)	Regional Policy	2022
Spain	National Mobile Phone Regulations (School Council Recommendations)	Regulation	2024
Spain	Programa de Bienestar Emocional en Educación	Program	2024
Spain	AEPD Global Strategy on Children, Digital Health & Privacy	Strategy	2024



Lithuania	National Education Development Programme 2021–2030	Strategy	2021
Lithuania	National Digital Decade Roadmap (Digital Decade Roadmap)	Strategy	2023
Lithuania	"Lithuania 2050" State Progress Strategy	Strategy	2022
Lithuania	Guidelines for Digital Education ("Skaitmeninio švietimo gairės")	Guidelines	2023
Lithuania	Restrictions on the use of mobile phones in schools in some European Union countries	Analytical review	2025
Lithuania	Guidelines for the use of smart devices and the internet. For schools and families	Guidelines	2020
Lithuania	Recommendations on the use of students' personal mobile phones and other information technology devices in pre-school and general education school	Recommendations	2025
Malta	Digital Education Strategy 2024–2030	Strategy	2023
Malta	One Device Per Child (ODPC) Program	Program	2016
Malta	BeSmartOnline! Safer Internet Centre	Program	2010
Malta	Data Protection Act (Cap. 586)	Regulation	2018
Malta	Cyber Security Strategy 2023–2026	Strategy	2023
Malta	Personal, Social & Career Development (PSCD) Curriculum	Curriculum	2019
Malta	Mental Health Support Services (School Psychological Service, Helpline 1579, Kellimni.com)	Program	2022
Malta	eSafety Label Certification	Accreditation Program	2014
Malta	Institute for Education CPD Programs	Professional Development	2020
Europe-wide	European Schoolnet – Well-Being in Digital School Environments (Agile Collection, Vol. 5)	Research Report	2025
Europe-wide	All Digital – "Digital Well-Being: What it means for educators and learners"	Report	2023
Europe-wide	Vissenberg, J. et al., "Digital literacy and resilience as facilitators of young people's well-being?" (European Psychologist)	Research Paper	2022



References

Bianchi, G., Pisiotis, U., & Cabrera Giraldez, M. (2022). GreenComp: The European sustainability competence framework (Y. Punie & M. Bacigalupo, Eds.; EUR 30955 EN; JRC128040). Publications Office of the European Union.

<https://doi.org/10.2760/13286>

Council of the European Union. (2022, November 28). Council conclusions on supporting well-being in digital education (2022/C 469/04). Official Journal of the European Union. Publications Office of the European Union.

<https://op.europa.eu/en/publication-detail/-/publication/a9a8afcb-7765-11ed-9887-01aa75ed71a1>

Education Estonia. (n.d.). Enhancing learning through digital integration: Digital learning study. Retrieved July 31, 2025, from

<https://www.educationestonia.org/digital-learning-study/>

Education Estonia. (2025, February 26). Estonia launches AI Leap 2025 to transform education. Retrieved July 31, 2025, from

<https://www.educationestonia.org/estonia-launches-ai-leap-2025-to-transform-education/>

EdTech Estonia. (n.d.). Strategy 2023–2027. Retrieved [25.08.2025], from EdTech Estonia website: <https://www.edtechestonia.org/resources>

España Digital 2026. (n.d.). Programa Código Escuela 4.0. España Digital. Retrieved July 29, 2025, from

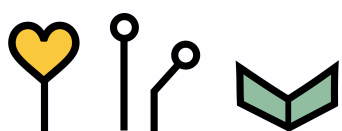
<https://espanadigital.gob.es/en/lines-action/programa-codigo-escuela-40>

Eurydice. (2025). National reforms in school education: Malta. Education, Audiovisual and Culture Executive Agency (EACEA), European Commission. Retrieved July 31, 2025, from

<https://eurydice.eacea.ec.europa.eu/euryperia/malta/national-reforms-school-education>

European Commission. (2024, February 19). Working on digital well-being in education? Apply for Erasmus+ funding now [News item]. European Education Area. Retrieved July 29, 2025, from

<https://education.ec.europa.eu/news/working-on-digital-well-being-in-education-apply-for-erasmus-funding-now>



European Commission. (2025, May 26). European Digital Education Hub [Web page]. European Education Area. Retrieved July 29, 2025, from <https://education.ec.europa.eu/focus-topics/digital-education/action-plan/europe-an-digital-education-hub>

European Commission. (2025, July 17). Digital Education Action Plan (2021–2027). European Education Area. <https://education.ec.europa.eu/focus-topics/digital-education/action-plan>

European Commission. (n.d.). Europe's Digital Decade: digital targets for 2030. European Commission. Retrieved July 29, 2025, from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en

European Commission. (2022, April 29). Estonia: National Reform Programme 2022 (Annex) [PDF]. Retrieved July 29, 2025, from https://commission.europa.eu/document/download/4c8d4c6a-9fc9-4b27-8107-7f907145b8df_en?filename=nrp_2022_estonia_annex_en.pdf

European Commission, Council of the European Union, & European Parliament. (2022, January 26). European Declaration on Digital Rights and Principles for the Digital Decade (COM 2022 28 final). Retrieved July 29, 2025, from <https://digital-strategy.ec.europa.eu/en/library/european-declaration-digital-rights-and-principles>

European Commission. (2022, May 11). The new Better Internet for Kids strategy is out! Introducing BIK+ [Press release]. Better Internet for Kids. Retrieved July 29, 2025, from <https://better-internet-for-kids.europa.eu/en/news/new-better-internet-kids-strategy-out-introducing-bik>

European Commission. (n.d.). Safer Internet Centre network. Better Internet for Kids. Retrieved July 29, 2025, from <https://better-internet-for-kids.europa.eu/en/sic>

European Commission, Directorate-General for Research and Innovation. (2025, July 15). European Innovation Scoreboard 2025: Country profile – Estonia [PDF]. Publications Office of the European Union. Retrieved from https://ec.europa.eu/assets/rtd/eis/2025/ec_rtd_eis-country-profile-ee.pdf

European Schoolnet. (2025). Well-being in digital environment in school: Agile Collection of Information, Vol. 5 [PDF report]. European Schoolnet. Retrieved July 29, 2025, from

<http://www.eun.org/documents/411753/12884590/Agile+collection+of+Information+vol.5.pdf>

Finnish National Agency for Education. (2016). New national core curriculum for basic education: Focus on school culture and integrative approach [PDF]. Finnish National Agency for Education. Retrieved from <https://www.oph.fi/sites/default/files/documents/new-national-core-curriculum-for-basic-education.pdf>

Foresight Centre (Arenguseire Keskus). (n.d.). Our research. Riigikogu's Foresight Centre, Parliament of Estonia. Retrieved July 31, 2025, from <https://arenguseire.ee/en/our-research/>

Foundation for Social Welfare Services. (2025, March). BeSmartOnline!: Malta's safer internet centre. Retrieved July 31, 2025, from <https://www.besmartonline.info/>

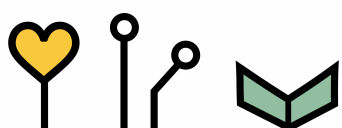
García-Luque, O., Faura-Martínez, Ú., & Lafuente-Lechuga, M. (2023). Desigualdad Social y Territorial de la Educación en España. Multidisciplinary Journal of Educational Research, 13(1), 166-195.

GDPR.eu. (n.d.). What is GDPR? Retrieved July 29, 2025, from <https://gdpr.eu/what-is-gdpr/>

Government of the Republic of Lithuania. (2021, December 1). Nutarimas dėl 2021–2030 m. plėtros programos valdytojos Lietuvos Respublikos Švietimo, mokslo ir sporto ministerijos švietimo plėtros programos patvirtinimo [Resolution No. 25242]. E-Seimas – Lietuvos Respublikos teisės aktai. Retrieved July 29, 2025, from <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/bb746f03565d11ec86bdc0a6d573b32/>

Government of the Republic of Lithuania. (2022, April 11). Įsakymas V-516 dėl 2021–2030 m. plėtros programos valdytojos Lietuvos Respublikos švietimo, mokslo ir sporto ministerijos pažangos priemonės Nr. 12-003-03-01-02 „Vykdyti EdTech skaitmeninę švietimo transformaciją“ aprašo patvirtinimo [Order No. V-516]. e-TAR – oficialūs teisės aktai. Retrieved July 29, 2025, from <https://www.e-tar.lt/portal/lt/legalAct/254ed330b95e11ec8d9390588bf2de65/asr>

Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. (2022a, November 24). Plan de Digitalización y Competencias Digitales del Sistema Educativo (Plan #DigEdu). INTEF. Retrieved July 29, 2025, from <https://intef.es/Noticias/plan-de-digitalizacion-y-competencias-digitales-del-sistema-educativo-plan-digedu/>



Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. (2022b, May 17). Marco de referencia de la competencia digital docente [News item]. INTEF. Retrieved July 29, 2025, from

<https://intef.es/Noticias/marco-de-referencia-de-la-competencia-digital-docente/>

Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. (n.d.). Competencia digital del alumnado. INTEF. Retrieved July 29, 2025, from

<https://intef.es/competencia-digital-educativa/competencia-digital-del-alumnado/>

Kalmus, V., Tambaum, T., & Abuladze, L. (2023). Use of digital tools, digital skills and mental well-being. In M. Sisask (Ed.), Estonian Human Development Report 2023: Mental Health and Well-Being (pp. 235–250). SA Eesti Koostöö Kogu. Retrieved from

<https://inimareng.ee/en/4-1-use-of-digital-tools-digital-skills-and-mental-well-being/>

Kurk Lietuvai. (2023). Skaitmeninio švietimo gairės: galutinis dokumentas [PDF].

Retrieved July 29, 2025, from

<https://data.kurkl.lt/wp-content/uploads/2022/09/Skaitmeninio-svietimo-gaires--galutinis-2.pdf>

Ministry of Economic Affairs and Communications, Republic of Estonia. (2021, October 7). Estonia's Digital Agenda 2030: Digital Society Development Plan 2021–2030 [PDF]. Retrieved July 29, 2025, from

https://www.mkm.ee/sites/default/files/documents/2022-04/Digiühiskonna%20arengukava_ENG.pdf

Ministry of Education and Culture of Finland. (2022, March 11). Framework for digitalisation in early childhood education and care, comprehensive school education and liberal adult education [Project web page]. Finnish Government.

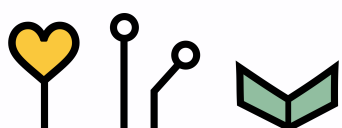
Retrieved July 31, 2025, from <https://okm.fi/en/project?tunnus=OKM013:00/2022>

Ministry of Economic Affairs and Employment of Finland; Coordination Group for Digitalisation. (2022, December 2). Finland's digital compass: A strategic roadmap for digitalisation and the data economy [PDF]. Publications of the Government of Finland 2022:72. Retrieved from

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/164472/VN_2022_72.pdf?sequence=1&isAllowed=y

Ministry of Economy and Innovation, Republic of Lithuania. (2024, March 13).

Lietuvos Respublikos nacionalinis skaitmeninio dešimtmečio planas [National Digital Decade Plan]. Approved by Government Decision No. 10, March 13, 2024. Retrieved July 29, 2025, from <https://eimin.lrv.lt/media/viesa/saugykla/2024/3/9cSWsDVIXso.pdf>



Ministry of Education and Culture [Opetus- ja kulttuuriministeriö]. (2023, November 9). Policies for the digitalisation of education and training until 2027 [PDF]. Publications of the Government of Finland 2023:48. Retrieved from

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/165248/OKM_2023_48.pdf

Ministry of Education and Research, Republic of Estonia. (2021). Education Sector Development Plan 2021–2035 [PDF]. Retrieved July 29, 2025, from

https://www.hm.ee/sites/default/files/documents/2022-10/haridusvaldkonna_arengukava_2035_kinnitaud_vv_eng_0.pdf

Ministry of Education and Research, Republic of Estonia. (2021). Youth Sector Development Plan 2021–2035 [PDF]. Retrieved July 29, 2025, from

https://www.hm.ee/sites/default/files/documents/2022-10/ee_youth_sector_development_plan_2021-2035_en_0.pdf

Ministry of Education and Research & Ministry of Economic Affairs and Communications of the Republic of Estonia. (2021, July 15). Development plan for research, development, innovation and entrepreneurship (TAIE) 2021–2035 [PDF]. Approved by Government of the Republic of Estonia, July 15, 2021. Retrieved July 29, 2025, from

https://www.hm.ee/sites/default/files/documents/2022-10/taie_arengukava_kinnitatud_15.07.2021_211109a_en_final.pdf

Ministry for the Economy, Enterprise and Sustainable Development. (2023). National Cybersecurity Strategy 2023–2026 [PDF]. Government of Malta. Retrieved from <https://economy.gov.mt/wp-content/uploads/2023/05/National-Cyber-security-2023-2026.pdf>

Ministry for Education, Sport, Youth, Research and Innovation. (2023, December). Visioning the future by transforming education: National Education Strategy 2024–2030 [PDF]. Government of Malta. Retrieved from

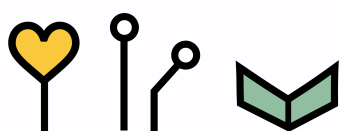
<https://education.gov.mt/wp-content/uploads/2024/05/NATIONAL-EDUCATION-BO-OKLET-ENG-Version.pdf>

Ministry for Education, Sport, Youth, Research and Innovation. (2025, April). National Strategy for Digital Education 2025–2030 [PDF]. Government of Malta. Retrieved from

https://education.gov.mt/wp-content/uploads/2025/04/NS_DDLTS-25_Eng-1.pdf

MRCDD: Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado. (2022). Marco de Referencia de la Competencia Digital Docente. Ministerio de Educación y Formación Profesional.

<https://intef.es/Noticias/marco-de-referencia-de-la-competencia-digital-docente/>



Office of the Attorney General (Malta). (2021, January 9). Processing of Personal Data (Education Sector) Regulations, S.L. 586.7 [Subsidiary legislation]. Legislation of Malta. Retrieved July 29, 2025, from <https://legislation.mt/eli/sl/586.7/eng>

Office of the Seimas of the Republic of Lithuania. (2024). State Progress Strategy: Lithuania's Vision for the Future of 'Lithuania 2050' [PDF]. Retrieved July 29, 2025, from https://www.lrs.lt/sip/getFile3?p_fid=83423

Punie, Y., & Redecker, C. (Eds.). (2017). European framework for the digital competence of educators: DigCompEdu (EUR 28775 EN; JRC107466). Publications Office of the European Union. <https://doi.org/10.2760/159770>

Riigi Teataja. (2019). Organisation of Research and Development Act [Consolidated version]. In force since 2 May 1997; amended through 2019. Retrieved July 29, 2025, from <https://www.riigiteataja.ee/en/eli/503062019008/consolide>

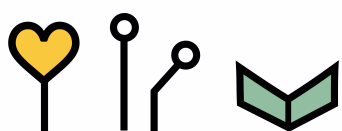
Riigi Teataja. (2024). Higher Education Act [Consolidated version]. In force from 1 August 2024. Retrieved July 29, 2025, from <https://www.riigiteataja.ee/en/eli/506082024010/consolide>

Riigi Teataja. (2025). Public Information Act [Consolidated version]. Riigi Teataja. Retrieved July 29, 2025, from <https://www.riigiteataja.ee/en/eli/514112013001/consolide/current>

Riigi Teataja. (2025). The Adult Education Act [Consolidated version]. In force since [effective date]. Retrieved July 29, 2025, from <https://www.riigiteataja.ee/en/eli/525042025003/consolide>

Skaitmeninės etikos centras & Paramos vaikams centras. (2020, September 8). Praktinės išmaniųjų įrenginių ir interneto naudojimo gairės – Mokykloms ir šeimoms [PDF]. e-etika.lt. Retrieved August 25, 2025, from https://e-etika.lt/odemsoob/2020/09/Išmaniųjų-įrenginių-ir-interneto-naudojimo-gairės_Mokykloms-ir-šeimoms-2020_SEC-ir-PVC_2020-09-08.pdf

Švietimo, mokslo ir sporto ministerija. (2025, August 1). Naujais mokslo metais visos švietimo įstaigos turės pasitvirtinti tvarkas dėl mokinių asmeninių mobiliųjų telefonų naudojimo [Press release]. Švietimo, mokslo ir sporto ministerija. Retrieved August 25, 2025, from <https://smsm.lrv.lt/lt/naujienos-1/pranesimai-ziniasklaidai-1/naujais-mokslo-metais-visos-svietimo-istaigos-tures-pasitvirtinti-tvarkas-del-mokiniu-asmeniniu-mobiliuju-telefonu-naudojimo-9NUz/>

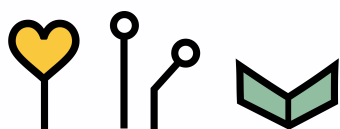


Vuorikari, R., Kluzer, S., & Punie, Y. (2022). DigComp 2.2: The digital competence framework for citizens – With new examples of knowledge, skills and attitudes (EUR 31006 EN; JRC128415). Publications Office of the European Union.

<https://doi.org/10.2760/115376>

XTEC – Xarxa Telemàtica Educativa de Catalunya. (n.d.). Competència digital de l'alumnat. Projectes XTEC. Retrieved July 29, 2025, from

<https://projectes.xtec.cat/digital/competencia-digital/competencia-digital-alumnat/>





WINDEE

Short description of WINDEE

WINDEE is a policy experimentation project aimed at improving the digital well-being of students and educators in educational settings across Europe. It addresses the lack of understanding, strategic approaches, and coherent policies concerning the mental, emotional, physical, and cognitive impact of digital education.



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