

IMPLEMENTATION OF RECOMMENDATION CM/REC(2019)10 ON DEVELOPING AND PROMOTING DIGITAL CITIZENSHIP EDUCATION

STATE OF PLAY



**IMPLEMENTATION
OF RECOMMENDATION
CM/REC(2019)10 ON DEVELOPING
AND PROMOTING DIGITAL
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– STATE OF PLAY**

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CONTENTS

FOREWORD	5
CHAPTER 1 – EXECUTIVE SUMMARY	7
Study scope, objectives and approach	7
Key findings	7
Recommendations	9
CHAPTER 2 – INTRODUCTION	13
Study objectives and scope	13
Methodological approach	14
CHAPTER 3 – EUROPEAN AND INTERNATIONAL FRAMEWORKS RELEVANT FOR DCE	17
CHAPTER 4 – MEMBER STATES’ ACTIONS AND INITIATIVES RELEVANT FOR DCE	21
Policy implementation of the DCE Recommendation	21
Actions to promote the DCE Recommendation in formal, non-formal and informal education settings	27
Frameworks for assessing the impact of the DCE Recommendation	32
Stakeholder participation	34
Frameworks for co-operation between public, private and civil sectors and education institutions	37
Member states’ participation in frameworks for international co-operation	39
Additional information on implementation	44
Training of teachers and education professionals	45
CHAPTER 5 – CONCLUSIONS AND RECOMMENDATIONS	47
European and international frameworks relevant for DCE	47
Integration of DCE into national policies, legislation and curriculums	47
Actions to promote the DCE Recommendation and related initiatives	47
Frameworks for assessing the impacts of the DCE Recommendation	48
Stakeholder involvement in design, implementation and evaluation	48
Frameworks for co-operation between public, private, civil and education sectors	49
Member states’ participation in frameworks for international co-operation	49
APPENDICES	51
Appendix 1 – Intervention logic of Recommendation CM/Rec(2019)10	53
Appendix 2 – Analytical framework	55
REFERENCES	59

TABLES

Table 1. Contributions received to the validation of the survey	15
Table 2. National policies mentioning DCE	21
Table 3. Topics of main strategies and policies identified	22
Table 4. Typology of awareness-raising activities on DCE	27
Table 5. Best-practice projects on DCE	29
Table 6. Best-practice examples of frameworks for co-operation	39
Table 7. Frameworks for international co-operation – Active expert groups	42

FIGURES

Figure 1. DCE concepts and related principles	14
Figure 2. Awareness-raising strategies in formal, non-formal and informal education settings	28
Figure 3. Translation of the DCE Recommendation across countries	45

Foreword

Digital citizenship education lies at the heart of preparing learners for active and responsible participation in our increasingly digitalised societies. Rooted in the Council of Europe's core principles of human rights, democracy and the rule of law, Committee of Ministers Recommendation CM/Rec(2019)10 on developing and promoting digital citizenship education provides a crucial framework to guide member states in fostering these competences across formal, non-formal and informal learning environments.

This report presents the first comprehensive review of the implementation of Recommendation CM/Rec(2019)10. It offers a detailed overview of how member states have integrated the principles of digital citizenship education into their national policies, curricula and initiatives. It also highlights the collaborative efforts made by diverse stakeholders, including educators, policy makers, civil society and the private sector, in supporting digital literacy, inclusion and safety.

The findings underline the significant progress made, alongside the challenges faced, such as the limited direct referencing of the recommendation in national documents, variability in translation and dissemination efforts and the ongoing need to strengthen stakeholder involvement, particularly in evaluation processes.

Importantly, the report underscores the essential role of international co-operation and shared learning in advancing digital citizenship education across Europe. The insights and recommendations provided in the report will help member states to enhance their strategies, ensuring that digital education is inclusive, effective and aligned with broader democratic values.

I commend the dedicated efforts of all involved in this review, from the Steering Committee for Education to the contributing experts and national authorities. Their work not only informs current policy but also sets the foundation for the future development of digital citizenship education across Europe.

As we move forward, the Council of Europe remains committed to supporting member states in realising the full potential of digital citizenship education, fostering environments where all learners can thrive in the digital world safely, ethically and with confidence.



Villano Qirazi
Head of the Education Department
Council of Europe



Chapter 1

Executive summary

Study scope, objectives and approach

Recommendation CM/Rec(2019)10 of the Committee of Ministers to member States on developing and promoting digital citizenship education (the DCE Recommendation) was adopted by the Committee of Ministers of the Council of Europe on 21 November 2019. This study informs the first review of the implementation of the DCE Recommendation, focusing on the following provisions of the Recommendation addressed to the governments of member states:

- ▶ review their legislation, policies and practices, including learning frameworks, to ensure that they are aligned with the recommendations, principles and further guidance set out in the appendix to this Recommendation; promote their implementation in formal, non-formal and informal education settings; and assess the impact of the legislation, policies and practices at regular intervals;
- ▶ involve all relevant stakeholders in the design, implementation and evaluation of digital citizenship education (DCE) legislation, policies and practices, including through the provision of appropriate resources and training;
- ▶ support the creation of frameworks for co-operation between public, private and civil sectors and education institutions, and ensure that they align with relevant national, European and international standards and uphold the right of citizens to equitable quality education;
- ▶ pursue and encourage co-operation between the Council of Europe and other international organisations in designing and implementing strategies, policies, programmes, research and other projects on digital citizenship education and on the use of digital technologies in education, and share on an ongoing basis good practices, pedagogical innovations and educational resources.

The review was conducted through extensive desk research and an online validation survey. The desk research covered national, European and international sources to map the relevant policies, actions and co-operation frameworks implemented at national and international levels in the field of digital citizenship education. The findings of the desk research at the national level were then validated through an online survey with the Council of Europe Steering Committee for Education.

Key findings

Existence of non-binding European and international frameworks relevant for DCE

Several frameworks, policies and guidelines have been developed by European (Council of Europe, European Union institutions) or international organisations (Organisation for Economic Co-operation and Development (OECD), United Nations Children's Fund (UNICEF), United Nations Educational, Scientific and Cultural Organization (UNESCO)) to promote concepts related to DCE such as digital skills, digital education, online safety, media literacy and digital inclusion. These documents are generally not binding but play a role in shaping the national policies and practices of the Council of Europe member states.

Limited direct integration of DCE into national policies, despite other relevant initiatives

The study found that only five member states (Belgium, France, Iceland, Malta and the Republic of Moldova) make explicit reference to the DCE Recommendation or DCE principles of the Council of Europe in their policy documents or curriculums. Some member states refer to other initiatives of the Council of Europe on lifelong learning, the rights of the child in the digital environment and education for democratic citizenship in their national strategic documents.

Despite not referring directly to the DCE Recommendation of the Council of Europe, many member states have other relevant national strategies and policies in place, conveying some of the principles of the DCE Recommendation, for instance those on digital education, digital skills, media literacy, online safety, digital citizenship, or more broadly digitalisation in general. These initiatives are mostly national strategies, action

plans, road maps, national agendas or programmes, implemented through legislation, revisions of learning frameworks, funding programmes and soft-law measures.

Wide range of awareness-raising strategies

Awareness-raising strategies aimed at promoting DCE principles can either be directly related to national strategies and policies, or they can have a broader scope involving collaboration between authorities and diverse stakeholders across multiple contexts. This study shows that countries engage in awareness-raising strategies through formal, non-formal and informal approaches. While formal education integrates DCE principles into curriculums, non-formal initiatives like workshops and informal initiatives like social-media campaigns complement these efforts by promoting lifelong learning and informal engagement. In this regard, this review identifies that child-friendly resources help bridge gaps in understanding and facilitate the practical application of DCE principles. Accordingly, many countries employ innovative methods to communicate DCE principles, using various media formats such as videos, gamified learning and interactive platforms.

This review shows that awareness activities target a broad range of stakeholders, from students and teachers to parents, civil society organisations and policy makers, ensuring a holistic approach. In this context, Safer Internet Centres play a key role, acting as focal points for the different initiatives in European countries, helping to raise awareness through centralised platforms.

Diverse frameworks for assessing the impacts of the DCE Recommendation

The national strategies and policies identified in the areas of digital transformation, digital education and digital skills generally include provisions on their implementation, monitoring and evaluation, but some do not provide such information. In terms of frequency, most of the strategies include a final evaluation, but many also propose intermediary monitoring and evaluation exercises, with regular progress reports.

In most countries, the strategies are monitored directly by the ministries in charge, sometimes with specific steering committees or with independent experts. Depending on the administrative structure, some of the strategies are implemented and monitored at the local level. In terms of the assessment methods, member states often define key performance indicators on the objectives and actions to be monitored, relying on internal administrative data, external indices and indicators, or survey and feedback data collected from stakeholders. The results of the national monitoring and evaluation are published in reports or presented in monitoring dashboards or observatories in some countries, although only a limited number of evaluation reports are publicly available.

Collaborative approaches for stakeholder involvement in design and implementation, but evaluation remains challenging

Member states widely recognise the importance of stakeholder involvement in designing DCE legislation and policies. The implementation of such policies is usually achieved thanks to a collaborative approach involving policy makers, educators, parents and students. Member states use diverse strategies to encourage stakeholder participation in the design phase, such as public consultations, working groups with diverse representation and establishing channels for feedback from educators, parents and students. However, there is a lack of evidence on specific mechanisms to ensure equitable representation and meaningful participation from diverse stakeholders.

A similar collaborative approach is commonly employed during the implementation phase of DCE legislation and policies. Several countries have established multisectoral councils to oversee and guide the implementation of national digital-skills strategies. This signifies a trend towards shared responsibility and collaboration in promoting DCE effectively.

There is little evidence of consistent, meaningful stakeholder involvement in the evaluation of DCE-related initiatives. While many member states have evaluation processes, the specific mechanisms for engaging stakeholders in shaping these evaluations often remain unclear.

Co-operation between public, private, civil and education sectors is strong but not always formalised

While few countries explicitly link national frameworks to the DCE Recommendation, many member states integrate collaborative elements into their wider digital strategies, often involving public entities, the private sector and civil society through various initiatives, in compelling instances of effective DCE implementation. The proliferation of multistakeholder initiatives, particularly Safer Internet Centres, contributes to greater collaboration,

provides centralised platforms for sharing resources, and raises awareness about DCE. Co-operation in the field of DCE extends beyond national borders, with international organisations and initiatives playing a significant role in supporting and promoting DCE implementation.

However, there is little evidence as to the formal structures and operational mechanisms of these co-operative frameworks. Evidence on the alignment of co-operation frameworks with standards for equitable quality education is also limited. While several initiatives and partnerships target specific groups to promote digital inclusion and address potential disparities in access to quality DCE, the extent to which existing frameworks promote inclusivity and address the needs of diverse learners remains unclear.

Member states are actively involved in frameworks for international co-operation

The findings of the study highlight the importance of international collaboration for the development of DCE. It distinguishes between international co-operation frameworks involving the Council of Europe and other frameworks beyond it. Regarding the former, the DCE Promoters' Network serves as a centralised platform for sharing information and good practices, enabling countries to learn from each other, while broadening the dissemination of DCE principles. In addition, the planned activities for the European Year of DCE 2025 will encourage more active participation and provide a valuable opportunity to identify the most successful practices and scale them across different contexts. Furthermore, the alignment of DCE activities with other educational frameworks like the Reference Framework of Competences for Democratic Culture ensures that DCE efforts are integrated within broader objectives.

Other international co-operation frameworks involve international and supranational organisations, such as the European Commission, the United Nations, UNESCO, the OECD, the Global Education Network, the International Telecommunication Union (ITU), among others. These activities include the establishment of active expert groups and networks, ongoing projects of international co-operation, and other collaborative platforms such as conferences, workshops and training sessions.

Limited member state efforts in translating the DCE Recommendation

The results of the online survey revealed that while a few countries have translated the DCE Recommendation and others have expressed plans to do so, the majority have yet to take action or did not respond to the survey. Specifically, only two countries – Bulgaria and Georgia – have translated the DCE Recommendation, while five countries – Armenia, Cyprus, the Czech Republic, Serbia and Slovakia – indicated plans to translate it. In addition, 19 countries reported that they had not translated the DCE Recommendation, 16 countries did not respond to the survey and/or the question on translation, and four countries deemed translation unnecessary, as their national languages were already covered by the Council of Europe's existing French and English translations.

Teacher training

Evidence on the use of teacher training to promote DCE is somewhat limited, though there are positive examples in several member states. Some have integrated DCE principles into formal programmes, offering both initial and ongoing training for educators. Others are developing targeted initiatives through professional development structures or broader digital education strategies. Many countries are still in the process of refining their approaches, with plans to expand training efforts in the coming years.

Recommendations

Based on the key findings presented above, the following recommendations can be formulated.

Alignment of national frameworks with the DCE Recommendation

- ▶ Given the low number of member states having explicitly implemented the DCE Recommendation of the Council of Europe, more member states should integrate the DCE Recommendation into their national policies, legislation and curriculums.
- ▶ Considering the large number of policies relating to one or more principles of DCE, member states should introduce more directly the principles of the DCE Recommendation into their national policies and curriculums, and make reference to the DCE framework of the Council of Europe whenever applicable. Member states could also link or gather the different actions fostering DCE under a common policy or legislation.

Awareness-raising actions

- ▶ Member states should continue adopting awareness-raising strategies in formal, non-formal and informal contexts, while making further efforts to diversify communication channels to ensure broader reach and inclusivity.

Monitoring and evaluation

- ▶ Since the national strategies and policies do not always contain a monitoring and evaluation plan, member states should introduce provisions for the monitoring and evaluation of their national policies related to DCE, indicating their approach and frequency.
- ▶ Given the diversity of approaches for evaluating policies related to DCE, it would be beneficial for member states and stakeholders to use comparable indicators recommended by the Council of Europe to measure progress.
- ▶ Considering that only a low number of evaluation reports on national strategies related to DCE could be identified in this study, member states should ensure that the evaluation reports on national initiatives are made publicly available, to enable stakeholders to assess the state of play of DCE progress.

Stakeholder involvement

- ▶ For the design, implementation and evaluation of DCE-related policies, member states could develop comprehensive guidelines and frameworks for stakeholder engagement, ensuring equitable representation from diverse groups, including policy makers, educators, parents, students and civil society organisations.
- ▶ In the design and implementation phase, member states could provide resources and support to empower stakeholder participation, ensuring that all voices are heard and considered in the design and implementation of DCE policies.
- ▶ Member states should encourage teacher training institutions to put national policies on DCE into practice, for example by recognising or acknowledging certificates or diplomas of teacher training activities.
- ▶ National policy makers should document and communicate the outcomes of stakeholder consultations transparently, fostering trust and accountability in the policy-making process.
- ▶ For the implementation of DCE-related policies, member states should establish regular communication channels and feedback mechanisms for stakeholder collaboration, ensuring ongoing dialogue and shared learning between different parties involved in DCE.
- ▶ For robust monitoring and evaluation of the implementation process, standards could be developed including metrics for assessing the effectiveness of stakeholder engagement and its impact on DCE outcomes.
- ▶ Stakeholders should be involved in the design of, data collection for and analysis of evaluation, ensuring that evaluations reflect the diverse perspectives of those involved in and affected by DCE policies.

Frameworks for co-operation

- ▶ Member states should further support formal, national DCE frameworks that are linked to the DCE Recommendation, providing a clear road map for DCE implementation aligned with international best practices.
- ▶ More research would be needed to assess the extent to which existing frameworks for co-operation promote inclusion and address the needs of learners of diverse ages.

International co-operation

- ▶ Considering the importance of international collaboration, member states should establish closer co-operation with the Council of Europe in their DCE initiatives. The European Year of DCE 2025 offers a valuable opportunity to strengthen collaboration, exchange knowledge and share good practices to advance DCE efforts across Europe.
- ▶ Given the added value of networks that centralise DCE initiatives, such as the DCE Promoters' Network and Safer Internet Centres, member states should intensify efforts to actively participate in these platforms, engaging diverse audiences and enhancing the dissemination of DCE initiatives.

Translation of the DCE Recommendation

- ▶ Given that only two countries have completed translations and five have plans to do so, apart from the French and English versions by the Council of Europe, member states should increase efforts to translate the DCE Recommendation into their national, regional and minority languages to further disseminate its principles.

Teacher training

- ▶ To enhance DCE training for teachers, member states should leverage existing training structures to ensure educators are equipped to address digital challenges and teach digital citizenship in schools.

Chapter 2

Introduction

Study objectives and scope

Recommendation CM/Rec(2019)10 of the Committee of Ministers to member States on developing and promoting digital citizenship education (the DCE Recommendation) was adopted by the Committee of Ministers of the Council of Europe on 21 November 2019. It includes seven recommendations to the governments of member states:

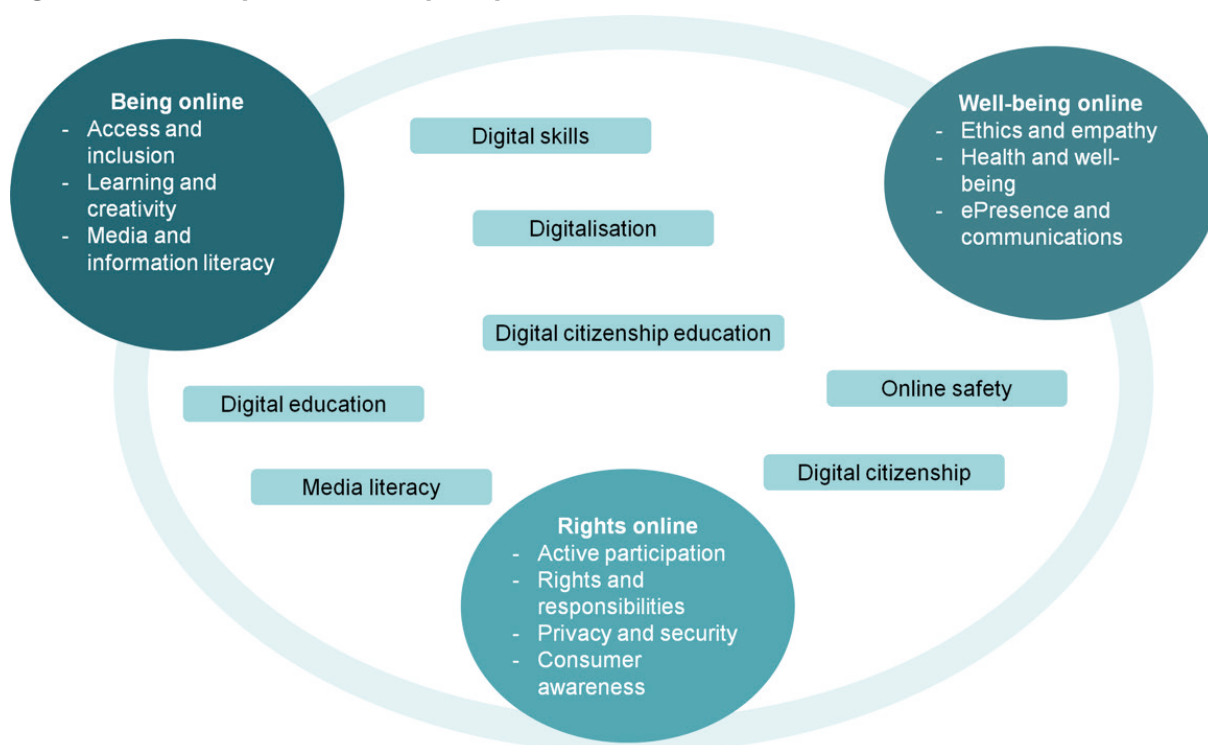
- ▶ review their legislation, policies and practices, including learning frameworks, to ensure that they are aligned with the recommendations, principles and further guidance set out in the appendix to this Recommendation; promote their implementation in formal, non-formal and informal education settings; and assess the impact of the legislation, policies and practices at regular intervals;
- ▶ involve all relevant stakeholders in the design, implementation and evaluation of digital citizenship education legislation, policies and practices, including through the provision of appropriate resources and training;
- ▶ provide or facilitate the provision of appropriate initial and in-service education and training on digital citizenship education to teachers and other professionals in education;
- ▶ support the creation of frameworks for co-operation between public, private and civil sectors and education institutions, and ensure that they align with relevant national, European and international standards and uphold the right of citizens to equitable quality education;
- ▶ pursue and encourage co-operation between the Council of Europe and other international organisations in designing and implementing strategies, policies, programmes, research and other projects on digital citizenship education and on the use of digital technologies in education, and share on an ongoing basis good practices, pedagogical innovations and educational resources;
- ▶ ensure that this DCE Recommendation, including the guidelines contained in the appendix, is translated and disseminated as widely as possible among competent authorities and stakeholders through accessible means, modes and formats of communication;
- ▶ examine the implementation of this DCE Recommendation, including the guidelines contained in its appendix, within the Committee of Ministers at least every five years and, if appropriate, at shorter intervals, and explore within the Steering Committee for Education Policy and Practice the implications of artificial intelligence (AI) and other emerging technologies for education generally and more specifically for their use in education.

The appendix to the DCE Recommendation sets out the principles on digital citizenship education and guidance on the institutional processes to implement these principles, including for learning and teaching these principles and assessing the progress as well as ensuring stakeholder involvement and co-operation.

This study reviews the implementation of the DCE Recommendation, focusing on recommendations a), b), d) and e) until the close of 2024.

Since the review found limited evidence of national policies, initiatives and co-operation frameworks explicitly referring to the DCE Recommendation, concept and material of the Council of Europe, the present study covered policies and actions with relevant related objectives, for example in the areas of digital education, digital skills, digital citizenship and online safety. These are referred to as “DCE-related principles” and “DCE-related policies” throughout this report. The strategies and policies related to digital education, digital skills and media literacy often aim to close the digital divide and equip children, students or citizens more widely with digital competences to be online. The initiatives on digital citizenship and online safety contribute to informing children and adults about their rights online and promote online well-being. The proximity of these principles with the DCE concepts is illustrated in Figure 1.

Figure 1. DCE concepts and related principles



Source: Authors' own work.

Moreover, for provisions a) and b) of the DCE Recommendation, this study presents the awareness-raising activities, evaluation frameworks and involvement of stakeholders in the design, implementation and evaluation of the policies identified, including those that do not make explicit reference to the DCE Recommendation but were deemed relevant due to their related objectives.

Methodological approach

The research for this first review of the DCE Recommendation was based on the understanding of the intervention logic of the Recommendation, represented graphically in Appendix 1, and an analytical framework, presented in Appendix 2, linking the provisions of the DCE Recommendation with review questions, judgment criteria, indicators and data sources.

The data collection activities included desk research and a validation survey.

The desk research was conducted at two levels in order to identify the member states' actions relevant for the DCE Recommendation.

First, the research team reviewed strategies, policies, recommendations and initiatives from European and international organisations, including the Council of Europe, the European Union, UNESCO and the OECD, that were related to the concept and principles of digital citizenship education, and that could influence member states' actions in the DCE area. In particular, the researchers looked for any binding policy instruments at European or international level relevant for DCE that may have been transposed by member states. However, none of the European and international initiatives identified were directly binding to member states, but at best were recommendations. The list of literature and repositories at European and international levels is available in the references and further reading sections.

Then, the researchers conducted desk research at national level in each of the 46 Council of Europe member states, following a harmonised template structured around the research questions presented in the analytical framework and covering the different provisions of the DCE Recommendation. The researchers assessed the extent to which each provision of the DCE Recommendation is applied in each country, specifying the relevant information and sources. The sources reviewed included European and international repositories of national strategies in the areas of digital education, digital skills, media literacy and online safety, as well as European and international networks, expert groups and coalitions where Council of Europe member states are involved in areas relevant for DCE. In addition, national strategies and policy documents from ministries in charge of

education, youth and digitalisation along with activities from relevant organisations and partnerships established at national level to promote digital education, media literacy, online safety and so on were reviewed.

The findings of the desk research at national level were then validated through an online survey with the Council of Europe Steering Committee for Education. The respondents were provided with the information collected by desk research for their respective country for each provision of the DCE Recommendation and were asked to review, validate or update the information identified. The online survey ran between 16 September and 20 December 2024. In total, survey contributions were received from 38 member states, as presented in Table 1.

Table 1. Contributions received to the validation of the survey

Countries	
Andorra	Luxembourg
Armenia	Malta
Austria	Monaco
Belgium	Montenegro
Bosnia and Herzegovina	Netherlands
Bulgaria	North Macedonia
Croatia	Norway
Cyprus	Poland
Czech Republic	Portugal
Estonia	Romania
France	San Marino
Georgia	Serbia
Germany	Slovak Republic
Greece	Slovenia
Iceland	Spain
Ireland	Switzerland
Italy	Türkiye
Latvia	Ukraine
Lithuania	United Kingdom

The survey contributions were taken into account to validate or revise the information collected by desk research and to present the final findings and comparative analysis.

The rest of this report presents the findings of the review of the DCE Recommendation as follows.

- ▶ Section 3 presents the relevant initiatives at European and international level that contribute to promoting DCE or related principles and could influence the take-up of national initiatives.
- ▶ Section 4 presents the member states' actions and initiatives to implement and promote the DCE Recommendation and its principles.
 - The section on policy implementation introduces the policy initiatives, the actions to promote DCE and its concepts and the frameworks in place to assess the implementation of the relevant initiatives.
 - The section on stakeholder participation describes stakeholder participation in the design, implementation and evaluation of DCE-related initiatives, as well as the existing frameworks for co-operation between public, private and non-profit organisations to promote DCE principles.
 - The section on member states' participation presents the participation of member states in frameworks for international co-operation relevant for DCE.
 - The section on additional information on implementation summarises the information received in the survey on additional provisions, namely about the translation of the DCE Recommendation and teacher training.

- ▶ Section 5 provides the conclusions and recommendations of the study.
- ▶ The appendices include:
 - the intervention logic of the DCE Recommendation (Appendix 1);
 - the analytical framework of the study (Appendix 2).
- ▶ The full findings on the implementation of the DCE Recommendation by member state based on the desk research and validation survey are presented on the European Year of Digital Citizenship Education 2025 website (Council of Europe 2025).

Chapter 3

European and international frameworks relevant for DCE

European institutions and international organisations have developed several frameworks, policies and guidelines to promote principles related to DCE. These documents, while generally not binding, play a significant role in shaping the national policies and practices of Council of Europe member states.

The topics most frequently covered by these organisations in such frameworks include digital skills and competences, digital education frameworks and online safety measures. Media literacy is also a significant focus, aiming to equip citizens with critical thinking skills necessary to navigate the digital information landscape. Furthermore, several frameworks emphasise the importance of equitable access to digital technologies and the development of comprehensive strategies to ensure that all individuals, especially children, can safely and effectively participate in the digital world. These recurring themes highlight the collective effort to create a digitally literate, safe and inclusive society.

The Council of Europe has a strong focus on human rights education and democratic citizenship, clearly emphasised through its strategies and recommendations. Along with Recommendation CM/Rec(2019)10 on developing and promoting digital citizenship education (Council of Europe 2019), the *Digital citizenship education handbook* (Council of Europe 2022b) provides educators with tools to teach students about their rights and responsibilities in the digital world. To facilitate the implementation of DCE in schools and other non-formal and/or informal learning contexts and to promote it at local, regional and national levels, the Council of Europe initiated in 2019 the DCE Promoters' Network, an informal network of education professionals.

Prior to the DCE Recommendation, the Council of Europe published in 2017 the "Internet literacy handbook" (Richardson, Milovidov and Schmalzried 2017), a practical resource for teachers and parents that offers advice on fostering responsible digital citizenship among young people. In addition, Recommendation CM/Rec(2018)7 on Guidelines to respect, protect and fulfil the rights of the child in the digital environment (Council of Europe 2018) underscores the need to safeguard children's rights online. This Recommendation emphasises creating a safe and enabling online environment for children, including enacting legal frameworks to address online risks and promoting children's digital literacy and critical thinking skills. The Recommendation encourages the empowerment of children to exercise their rights online, including ensuring children have access to age-appropriate information, promoting their participation in digital spaces, and supporting their right to freedom of expression. Finally, the Recommendation fosters the provision of guidance and support to parents and educators through resources and training to help adults guide children safely and responsibly in the digital environment.

Also, the Council of Europe Education Strategy 2024-2030 (Council of Europe 2024b) sets long-term goals for education systems across Europe. This strategy focuses on creating a more inclusive and equitable education system that equips all learners with the knowledge, skills and values they need to succeed in a rapidly evolving world, including in the digital landscape.

Moreover, the Council of Europe's Charter on Education for Democratic Citizenship and Human Rights Education (Council of Europe 2010) advocates embedding democratic principles and human rights education throughout the curriculum, fostering a democratic school culture, and preparing learners to engage responsibly in a diverse society. The Council of Europe publication *Competences for democratic culture – Living together as equals in culturally diverse democratic societies* also outlines the competences individuals need to actively participate in democratic societies, particularly in contexts of cultural diversity (Barrett 2016). These competences encompass values, attitudes, skills and knowledge that enable constructive engagement with others and informed decision making.

The European Union actively enhances digital education across its member states through various actions. The Digital Education Action Plan 2021-2027 (European Commission 2020) outlines initiatives to support the development of digital competences and infrastructure in schools, ensuring that all students gain essential digital skills. The plan is organised around two strategic priorities: a) fostering the development of a high-performing digital education system and b) enhancing digital skills and competences for the digital transformation. The actions designed to pursue these strategic priorities include improving dialogue among member states, producing recommendations on enabling factors and common guidelines on digital education and AI tools in education, and collecting data at the European Union level on student digital skills. To support these actions,

the Commission has established the European Digital Education Hub (European Commission 2021), an online community designed to address the current fragmentation of digital education policy, research and implementation practices across Europe.

The European Commission has been at the forefront of promoting digital education and digital skills within the European Union. It has developed key frameworks like the Digital Competence Framework for Citizens (DigComp 2.2; European Commission 2022b), which provides new examples of knowledge, skills and attitudes necessary for digital competence. The European Framework for the Digital Competence of Educators (DigCompEdu) (European Commission 2017) supports educators in their efforts to integrate digital technologies into teaching and learning. These initiatives are crucial in ensuring that both educators and learners are equipped with the necessary digital skills to thrive in a rapidly evolving digital landscape.

The Council of the European Union Recommendation of 28 May 2018 on promoting common values, inclusive education and the European dimension of teaching (Council of the European Union 2018) outlines the principles for creating inclusive education systems that respect and promote diversity and equality. In addition, the Council of the European Union Recommendation of 28 November 2022 on pathways to school success aims to ensure better educational outcomes for all learners by lifting the performance in basic skills and reducing early leaving from education and training (European Commission 2022a).

The European Union's updated Strategy for a Better Internet for Kids (BIK+), detailed in the publication "A digital decade for children and youth communication" (European Commission 2022c), aims to ensure that children are protected, respected and empowered online. This strategy builds on the 2012 BIK strategy and intends to improve young consumers' well-being online through a safe, age-appropriate digital environment and to provide equitable access to technology, digital skills and media literacy for all children. Under BIK+, the Better Internet for Kids portal will continue to provide a wealth of resources and best practices. The portal co-operates with the European Union co-funded network of Safer Internet Centres (European Union n.d.) in member states, which reaches out to children, parents and teachers.

More specialised European Union agencies also contribute to enriching the framework of digital citizenship education, addressing more specific issues. For instance, the European Union Agency for Cybersecurity publishes reports and guidelines on cybersecurity education, including the Cyber Hygiene Guidelines (European Union Agency for Cybersecurity 2017), which provide practical advice for enhancing online safety practices. The European Audiovisual Observatory provides reports and guidelines on media literacy in the digital environment, such as the Mapping of media literacy practices and actions in EU-28 (European Commission 2016), which offers comprehensive analyses and best practices for improving media literacy.

The OECD produces extensive reports and policy reviews on integrating educational technology and digital learning environments. For example, the OECD Digital Education Outlook (OECD 2023) examines the latest trends and innovations in digital education, offering valuable insights for policy makers and educators. The OECD guidelines on online safety, such as the OECD Recommendation on Children in the Digital Environment (OECD 2012/2021), outline policies to ensure safe and beneficial online experiences for young users. The OECD's Learning Compass 2030 (OECD 2019a) is a framework that helps students develop the knowledge, skills, attitudes and values they need to thrive in and shape the future.

UNICEF focuses on children's rights in the digital world through various initiatives. For instance, UNICEF's Child Protection in Digital Education (UNICEF 2023) policy brief and technical note aim to assist governments in ensuring the safe and effective use of digital learning tools in schools, emphasising equal access and child protection from potential risks.

UNESCO focuses on the digital aspects of global citizenship by promoting digital global citizenship education. The Citizenship Education in the Global Digital Age toolkit (UNESCO 2022a) offers comprehensive guidelines for educators, aiming to integrate digital citizenship concepts into curriculums. This toolkit emphasises the development of teacher training materials to enhance educators' ability to effectively teach digital citizenship. Additionally, UNESCO advances media literacy through frameworks like the Global Media and Information Literacy Assessment Framework (UNESCO 2013), which offers structured content for teaching critical thinking and media literacy skills.

The International Telecommunication Union, the United Nations specialised agency for information and communication technology (ICT), contributes to ICT skills development through guidelines and toolkits like the Digital Skills Toolkit (ITU 2018), which offers practical frameworks for governments and institutions to implement digital literacy programmes.

Through these diverse contributions, European institutions and international organisations play a crucial role in fostering digital citizenship education, addressing various aspects of digital literacy, and preparing individuals to navigate the digital world responsibly and effectively.

Chapter 4

Member states' actions and initiatives relevant for DCE

Policy implementation of the DCE Recommendation

The DCE Recommendation encourages the governments of member states to “review their legislation, policies and practices, including learning frameworks, to ensure that they are aligned with the recommendations, principles and further guidance set out in the appendix to [the DCE Recommendation]; promote their implementation in formal, non-formal and informal education settings; and assess the impact of the legislation, policies and practices at regular intervals”.

Overview of legislation, policies and practices, including learning frameworks (curriculums for school education, study programmes for higher education), updated or introduced to align with the DCE Recommendation

The DCE Recommendation encourages the governments of member states to review their legislation, policies and practices, including learning frameworks, to ensure that they are aligned with the recommendations, principles and further guidance set out in the appendix to the DCE Recommendation. This study has found that only five member states (Belgium, France, Iceland, Malta and the Republic of Moldova) make explicit reference to the DCE Recommendation or DCE principles of the Council of Europe in policy documents or curriculums (see Table 2).

Table 2. National policies mentioning DCE

Country	DCE reference
Belgium	The Media Education Plan of the Wallonia-Brussels Federation refers to the work of the Council of Europe and more specifically to the DCE website.
France	The French Ministry of Education has a dedicated web page on DCE, referring to the Council of Europe DCE web page, DCE Handbook and pedagogical material. The Charter for Digital Culture and Citizenship Education refers to the Council of Europe DCE web page. The Memorandum of 24 January 2022 on the generalisation of media and information education, addressed to academic rectors, directors of education institutions and teachers, is another initiative mentioned on the ministry web page dedicated to DCE, and refers to the Council of Europe work on media and information education.
Iceland	A new curriculum of digital citizenship education has been developed in line with the Council of Europe DCE recommendations and guidelines, with the involvement of a working group of teachers and the DCE Promoters' Network, under the co-ordination of the Directorate of Education and the Ministry of Education and Children. This will form part of the national curriculum guide for compulsory education.
Malta	The Digital Education Strategy 2024-2030 from the Ministry for Education, Youth, Sport, Research and Innovation outlines a comprehensive plan to integrate digital literacy and education across the national educational system. The document mentions the Council of Europe's Digital Citizenship Working Group and links to its resources for parents.
Republic of Moldova	The 2022 Order setting Standards for the Protection and Safety of Children/Students in the Online Environment, which promotes proactive behaviour and responsibility of children/pupils in formal and non-formal education activities, refers to the Council of Europe DCE Recommendation and to DCE through which critical thinking skills and competences are developed in a systematic way to contribute to children's safety in the online environment.

At least five member states refer to other initiatives of the Council of Europe in strategic documents. Namely, in Albania the 2021-2026 National Education Strategy (Albania 2021) mentions that it is aligned with the

recommendations of the Council of Europe on basic competences for lifelong learning. In Belgium, the Flemish Youth and Children’s Rights Policy Plan 2020-2024 (Flanders 2021) refers to, among others, the Council of Europe Committee of Ministers Recommendation CM/Rec(2018) on the rights of the child in the digital environment. In Ireland, the Digital Strategy for Schools to 2027 (Ireland 2022a) mentions the Council of Europe reports and guidelines on the rights of the child in the digital environment. In Portugal, the National Strategy for Education for Citizenship (Portugal 2017a) refers to the Council of Europe Charter on Education for Democratic Citizenship and Human Rights Education, and to the Council of Europe publication *Competences for democratic culture – Living together as equals in culturally diverse democratic societies*. The Unified National Strategy of Education and Science of Georgia 2022-2030 (Georgia 2022) considers the principles of the 2010 Council of Europe Charter on Education for Democratic Citizenship and Human Rights.

Despite not referring directly to the DCE Recommendation of the Council of Europe, other relevant national strategies and policy documents were identified in this study that convey some of the principles of the DCE Recommendation. Most of these strategies focus on digital education, digital skills, media literacy, online safety, digital citizenship or – more broadly – digitalisation in general.

Table 3 below provides an overview of the main topics covered in the strategies identified through desk research and the validation survey. However, this list is not exhaustive as other relevant policies may be in place that have not been covered by the research.

Table 3. Topics of main strategies and policies identified

Country	Digital citizenship education	Digital education	Digital skills	Media literacy	Online safety	Digital citizenship	Digitalisation
Albania		√	√		√	√	√
Andorra							√
Armenia		√		√			
Austria		√	√		√	√	√
Azerbaijan		√	√				
Belgium	√	√	√	√	√		√
Bosnia and Herzegovina		√		√			
Bulgaria		√	√		√		√
Croatia		√	√				√
Cyprus		√	√		√		√
Czech Republic		√	√				√
Denmark		√	√		√		√
Estonia		√	√	√	√		√
Finland		√	√	√			
France	√	√	√	√	√	√	
Georgia		√		√	√		
Germany		√	√	√	√	√	√
Greece		√	√			√	√
Hungary		√			√	√	
Iceland	√	√					√
Ireland		√	√		√		
Italy		√	√		√	√	√
Latvia		√	√		√		√
Liechtenstein		√	√	√	√	√	
Lithuania		√	√		√		

Country	Digital citizenship education	Digital education	Digital skills	Media literacy	Online safety	Digital citizenship	Digitalisation
Luxembourg		√	√	√	√	√	√
Malta	√	√	√	√	√	√	√
Republic of Moldova	√	√	√		√		√
Monaco		√					√
Montenegro		√	√	√	√		
Netherlands		√	√	√			√
North Macedonia		√	√		√	√	√
Norway		√	√		√	√	
Poland		√	√				
Portugal		√	√	√	√	√	√
Romania		√	√		√		
San Marino		√			√	√	
Serbia		√	√	√	√	√	
Slovak Republic		√	√	√	√		√
Slovenia		√	√		√		√
Spain		√	√		√	√	√
Sweden		√	√				√
Switzerland		√			√		√
Türkiye		√	√	√	√		√
Ukraine		√	√	√			
United Kingdom		√	√	√	√		√

Digital education

All member states of the Council of Europe except one have introduced digital education strategies or policies. For European Union member states, such policies may be linked to the European Union Digital Education Action Plan, including the Structured Dialogue with member states and the Council of the European Union Recommendation on the key enabling factors for successful digital education and training. National digital education strategies aim to foster the adoption of digital tools and the acquisition of digital literacy in formal education settings. For example, in Malta the Digital Education Strategy 2024-2030 outlines a comprehensive plan to integrate digital literacy and education across the national educational system, built on four pillars: nurturing digital global citizens, empowering educators for the 21st century, community engagement and collaboration, and enriching digital resources. Under the pillar “nurturing digital global citizens”, there are plans to introduce digital literacy classes in primary and secondary schools, promoting digital citizenship empowerment and online safety (Malta 2024). As another example, in the Netherlands, the 2019 Digitalisation Agenda for Primary and Secondary Education aims for pupils and teachers to be digitally literate, to have secure digital infrastructure and available digital learning resources and to sustain focus on the ethics of digitalisation in education (Netherlands 2019).

The digital education objective is sometimes embedded in broader education strategies. For example, in the Czech Republic, the Education Policy Strategy 2030 sets out a roadmap towards a developed and digital education system for the period 2020-30 to modernise the Czech Republic’s education system in the fields of regional education, formal and non-formal education, and lifelong learning (Czech Republic 2020).

In many countries, the formal education curriculum includes digital competences and literacy as well as other elements relevant for DCE. For example, in Romania, the Digital Competence Framework for Pupils defines a competence profile in the field of digital literacy for primary, secondary and high school graduates. Pupils’ digital

competences cover six key areas (basic skills to use common digital devices; information and data literacy; digital communication and collaboration; digital content creation; cybersecurity and responsible use of technology; problem solving and entrepreneurship), each area covering a wide range of skills aligned with the 10 DCE domains and different expected performance levels by educational cycle (Romania 2024). In Montenegro, the Framework for Digital Competence of Students aims at enhancing digital literacy and skills across various sectors, particularly in education, with a focus on five areas of digital competence: information and data literacy; communication and collaboration; digital content creation; safety; problem solving (Montenegro 2020). In Lithuania, the new preschool, primary, basic and secondary education curriculum approved in 2022 includes civic citizenship competences and digital competences which encompass digital content, digital communication, digital security and problem solving (Lithuania Education Portal n.d.). In Türkiye, the National Curriculum for Primary and Secondary Schools – updated in 2017 – aims to develop students’ competences in digital literacy, online safety, and the ethical use of digital tools, integrating these topics across various subjects and grade levels (Aktürkoğlu 2019). In 2024, Türkiye also started implementing the “Türkiye education model”, which includes skills related to the Council of Europe DCE principles, such as information literacy, digital literacy and citizenship literacy, in the curriculum (Türkiye 2024). In Norway, the Knowledge Promotion 2020 curriculum reform for primary and secondary education emphasises developing digital skills and responsible online behaviour among students. The curriculum includes specific competences related to DCE, such as understanding digital tools, online safety and ethical use of digital resources (Norway 2023). In Luxembourg, the Einfach Digital (“Simply Digital”) strategy introduced courses on coding and computational thinking in elementary education and on digital sciences in secondary education, and it sets a general framework for digital literacy with a reference guide (“Medienkompass”) (Luxembourg 2020a). In the 2021/22 school year, Luxembourg also introduced a new digital sciences subject to lower grades in secondary education, aiming to equip students with technical skills and competences for safe, effective engagement in the digital world (Luxembourg 2021b).

Digital skills

Most of the Council of Europe member states (at least 37 out of 46) have strategies or policies in place to foster digital skills. Somewhat related to digital education policies, the strategies to improve digital skills often go beyond formal education settings and include lifelong learning and initiatives for adult citizens and workers to promote digital inclusion and close the digital divide. For example, in Portugal, Digital Skills e.2030 (INCoDE.2030) is a public policy initiative launched in 2017 aimed at promoting digital skills essential for citizenship, employability and economic competitiveness, focusing on enhancing digital literacy, fostering innovation, and supporting the digital transition in education, inclusion and public administration (Portugal 2017b). In Malta, the National eSkills Strategy 2022-2025 focuses on developing digital skills with an inclusive approach through four pillars (education, society, workforce and ICT professionals) through education, awareness and collaboration with stakeholders (Malta 2022). In Poland, the Digital Competence Development Programme 2020-2030 focuses on digital-skills development for citizens, ICT sector specialists, employees of small and medium-sized enterprises, and public administration and national bodies (Poland 2023).

Some European Union member states make explicit reference to the European Reference Framework for Digital Competences. For instance, the Digital Competence Framework for Austria includes 27 individual competences in six competence areas (citizenship competences is one of them) and embeds relevant DCE principles such as safe internet use, participation, digital literacy and the capacity to communicate and express opinions (Fit4internet 2022). In Slovakia, the Strategy for Youth for the years 2021-2028 includes measures to provide training in the framework of lifelong learning to improve the digital skills of young people and those working with youth, including the skills defined in DigComp 2.2 (Slovakia 2021). In Cyprus, the Digital Skills National Action Plan 2021-2025 aims to develop digital skills starting in elementary school, create awareness of the importance of digital skills and ensure that the local population actively participates in the digital economy, and the action plan refers to the DigComp framework (Cyprus 2021).

Media literacy

Several Council of Europe member states (at least 19 out of 46) have introduced strategies or policies related to media literacy, promoting the ability to search and filter information. Some of these policies are directed to the formal or non-formal education settings. For example, in France, media and information education has been reinforced in the curriculum from primary school (cycle 3) to the end of secondary school, via the moral and civic education programmes. In particular, there are 18 hours dedicated to media and information literacy as part of the moral and civic education programme in lower secondary school (France 2024). In Bosnia and Herzegovina, the Strategy for the Development of Media and Information Literacy in the Field of Education in the Canton of Sarajevo aims to improve digital literacy and responsible media consumption and plans to integrate media and

information literacy in the education curriculums (Bosnia and Herzegovina 2022). In Georgia, the new subject media literacy has been adopted in 2023 as an elective subject under the national curriculum and is taught in 227 schools.¹ In Finland, the Media Education Policy plans to implement measures to develop children's and adolescents' programming, media literacy and ICT skills at school and during their leisure time (Finland 2019). In the Finnish National Core Curriculum for Early Childhood Education and Care, the objective of media education is to support children's potential to be active and express themselves in their community and to learn source and media criticism. In the Core Curriculum for Basic Education, media literacy is included as a transversal skill that is promoted in the instruction of every subject (EDMO Finland n.d.). In Armenia, in 2021, the Ministry of Education, Science, Culture and Sports adopted new state standards for general education, which define among others digital and media literacy. This competence involves understanding the role of the media in a democratic society, being able to navigate information flows and critically analyse them, being able to use media tools and create media products, and being aware of the risks associated with them (Armenia 2021a).

Other strategies aim to improve the media literacy of the general population. For instance, in the United Kingdom, the Online Media Literacy Strategy aims to ensure that every internet user is equipped with the necessary skills and knowledge for online safety, including critical thinking, the understanding of risks online and the ability to distinguish dis- and misinformation from genuine information (United Kingdom 2021).

Online safety

The majority of Council of Europe member states (at least 32 out of 46) have strategies or policies in place regarding online safety, covering issues such as cybersecurity, cyberbullying and responsible behaviour online. Some of these strategies target specifically the online safety of children or young people. For example, in the Republic of Moldova, the Order Setting Standards for the Protection and Safety of Children/Students in the Online Environment explicitly refers to the DCE Recommendation of the Council of Europe and promotes proactive behaviour and responsibility of children/pupils in formal and non-formal education activities to manage online identities and e-reputation, manage exposure to personal or illegal content, and interact constructively in the online environment (Moldova 2022). In Cyprus, the protection of students in online and digital education environments is supported by the 2018-2022 National Strategy for the Prevention and Management of School Violence (Cyprus 2018) and the National Strategy and Action Plan to Combat Sexual Abuse, Child Exploitation and Child Pornography (Foni Council 2021). In Germany, the Youth Protection Act aims to safeguard children and adolescents from online harm, including cybergrooming and cyberbullying. It mandates online services to implement protective measures, updates age classifications for media, and establishes the Federal Authority for Protecting Children and Adolescents in the Media to oversee compliance and promote co-ordination among stakeholders (Germany 2021).

Other countries address online safety for all citizens. For example, in the United Kingdom, the Online Safety Act aims at making internet services safer for individuals, by imposing duties on technology companies to reduce the risks of illegal and harmful content on their platforms, especially for children, by ensuring services are safe by design and protecting individuals' rights such as freedom of expression and privacy online (United Kingdom 2023). In Ireland, the Online Safety and Media Regulation Act empowers an Online Safety Commissioner, as part of the wider *Coimisiún na Meán*, to hold designated online services to account through binding online safety codes (Ireland 2022b). In Estonia, the Cybersecurity Strategy 2019-2022 emphasises the importance of educating citizens about cybersecurity, responsible online behaviour and the ethical use of digital technologies. It includes initiatives to integrate cybersecurity topics into educational curriculums at all levels (Estonia 2019a).

Some member states also have wider cybersecurity strategies targeting citizens, businesses and public services. For example, in Georgia, the National Cybersecurity Strategy aims to enhance cybersecurity culture and skills among students and organisations, establish effective cyberincident response systems, and promote research and technical advancements in cybersecurity (Georgia 2021). In Denmark, the National Strategy for Cyber and Information Security aims to protect Denmark's government, critical infrastructure, citizens and businesses from cyberthreats (Denmark 2021).

Digital citizenship

This study has found that a few countries (at least 16 out of 46 Council of Europe member states) have specific strategies or initiatives focusing on digital citizenship. Some of these initiatives cover digital rights and digital inclusion for all citizens. For example, in Germany, the Digital Strategy – Creating Digital Values Together aims

1. Online survey of national authorities.

to foster digital skills, along with secure and inclusive digital participation across society, the economy and government. The strategy includes building a digital civil society and addressing the risks of digital platforms such as hate speech, disinformation and digital violence (Germany 2022). In North Macedonia, the National ICT Strategy for 2021-2025 includes a digital citizenship model that aims to equip citizens with digital skills and to promote digital citizenship by increasing the number of confident and secure digital citizens, building up digital users ready to embrace innovative digital tools and technologies, fostering digital creativity, and enabling partnerships for future jobs (North Macedonia 2021). Although pre-dating the Council of Europe DCE Recommendation, a relevant initiative is Italy's Declaration of Internet Rights (Italy 2015) adopted by the Italian Chamber of Deputies in 2015, which sets principles to exercise active digital citizenship including the right to online knowledge and education, net neutrality and the rights and safeguards of people on platforms.

Other countries encompass digital citizenship within citizenship education. For instance, in Spain, the Ley Orgánica de Modificación de la Ley Orgánica de Educación (LOMLOE) law reintroduces citizenship education as a compulsory topic in formal education and mentions digital skills and online safety as part of the competences to be acquired. The law mentions that "the educational system will guarantee the full insertion of students in the digital society and the learning of responsible consumption and a critical and safe use of digital media, respectful of human dignity, social justice and environmental sustainability, constitutional values, fundamental rights and, particularly, respect and guarantee of personal and family privacy and the protection of personal data" (Spain 2020). In Austria, citizenship education is a cross-curricular topic in eighth-grade curriculums intended to cover equally the online and offline worlds, including methods for analysing, interpreting and creating content related to politics and society, including digital media (Austria 2023). In Italy, following Law No. 92 of 20 August 2019, which established the teaching of civic education at all school levels in a cross-curricular approach, in September 2024 the Ministry of Education and Merit issued updated guidelines for the teaching of civic education, which focus on the Constitution of Italy, sustainable development and digital citizenship (Italy 2024). In Portugal, the National Strategy for Education for Citizenship includes a set of domains that address digital citizenship issues, such as cyberbullying, media education, online addictions and cybersecurity (Portugal 2017a). In addition, the Portuguese curricular guidelines for ICT in the first cycle include digital citizenship as one of its domains, covering security, responsibility and respect in digital environments (Portugal 2018). In Greece, the "skills labs" in primary and secondary education aim to introduce soft skills such as life skills and digital skills to pupils, with digital citizenship being part of the life skills taught (Greece 2020a).

Digitalisation

Nearly all member states have a general digitalisation strategy in place, encompassing the digitalisation of citizens, businesses and governments, where the actions around digital skills can be relevant for the application of DCE principles. Since these general strategies were not the main focus of this study, they have been included in countries where no specific strategies were relevant for DCE (at least 29 out of 46 countries). However, the overview in Table 3 is not exhaustive.

Types of instruments

Most policy DCE-related instruments identified were overall national strategies, action plans, roadmaps, national agendas or programmes, setting out various general objectives and a list of actions across one or several fields, under the responsibility of one or more ministries. Member states have such national strategies, action plans or agendas in the areas of digital transformation, education and digital education, youth policy, digital skills, media literacy, AI, online safety and cybersecurity. The countries that have such programmes in place usually have specific budget lines allocated to the different actions.

In addition to these overall strategies, another policy instrument used is legislation via laws or regulations for the introduction of specific requirements or skills in the curriculum or specific tools in formal education. Some countries also have legislation on online safety and the protection of minors.

As a result of national strategies or legislation, DCE-related principles are often integrated in learning frameworks. As presented above, many national curriculums include digital competences in formal education settings (sometimes referring to the European Union DigComp framework or to national frameworks), but also other relevant subjects, such as media literacy or digital citizenship.

Finally, some countries have introduced soft-law instruments to promote DCE principles, such as the French Charter for Digital Culture and Citizenship Education (France 2023a), directed at the education community and students, or the Italian Declaration on internet rights for all citizens (Italy 2015).

Actions to promote the DCE Recommendation in formal, non-formal and informal education settings

The Council of Europe encourages the governments of member states to promote the implementation of the DCE Recommendation “in formal, non-formal and informal education settings”. Countries advocate for the adoption of DCE principles through a variety of methods. These include promoting the strategies mentioned in the overview of legislation, policies and practices through conferences, web pages and guidelines. In addition, they also extend their efforts beyond these national strategies to enhance awareness of responsible, ethical and safe internet usage. Accordingly, this section will first provide an overview of initiatives aimed at promoting national strategies, followed by an examination of specific governmental efforts in DCE beyond these strategies.

Table 4. Typology of awareness-raising activities on DCE

Awareness-raising activities linked to national strategies related to DCE	Awareness-raising activities beyond national strategies related to DCE
<p>Web pages and online resources</p> <p>Conferences and presentations</p> <p>Reports and guidelines</p>	<p>Conferences and workshops</p> <p>Training programmes</p> <p>Targeted projects and initiatives on DCE</p> <p>Reports and publications</p> <p>Events and campaigns</p> <p>Child-friendly resources</p>

Awareness raising linked to national strategies related to DCE

This study has found that that most countries promote the strategies mentioned in the overview of legislation, policies and practices through the creation of specific web pages and related digital content. For instance, in France, the Ministry of Education’s website features a dedicated page for DCE policies and initiatives and provides materials to support parents in digital education (France 2025). The web page features dedicated sections that explore the concept of digital citizenship, building on the Council of Europe’s DCE principles. It also highlights the 2025 European Year of Digital Citizenship Education and references the DCE Handbook. Similarly, the Digital Strategy for Education in Wallonia includes the development of a platform to provide resources and tools supporting the introduction of the new curriculum, enabling co-creation of content and integrating e-learning modules (Wallonia-Brussels Federation 2019). The Malta Directorate for Digital Literacy and Transversal Skills, responsible for the Digital Education Strategy 2024, has a dedicated web page highlighting various DCE initiatives and sharing the latest DCE news (Malta n.d.).

The creation of digital content also involves developing interactive platforms to raise awareness of DCE-related topics. For example, Montenegro’s Digital School platform, introduced under the 2022–2027 Strategy for the Digitalisation of the Education System, promotes digital skills and offers educational materials on DCE-related principles to complement classroom learning and support lifelong learning initiatives (Montenegro n.d.). Similarly, the Citizen’s Digital Academy, an initiative by the Ministry of Digital Government of Greece, provides free access to high-quality digital education for all Greek citizens. Currently, the platform offers over 279 courses, including various digital-skills self-assessment tools (Greece 2020b). In France, a teacher community focused on DCE was launched in January 2025, with the link available on the ministry web page dedicated to DCE.²

As part of their national policies, countries often initiate awareness campaigns to promote DCE-related principles. For instance, Poland, through its Digital Competence Development Programme, launched educational and informational initiatives like the Digital Parent Economy campaign, which aimed to educate parents on addressing online threats affecting children and young people (Poland 2020). The United Kingdom, as part of the Online Media Literacy Strategy, has developed the SHARE checklist, which provides the public with five easy steps to identify false content, encouraging users to stop and think before they share content online (United Kingdom 2021). Additional awareness-raising activities include producing explanatory videos, such as Ireland’s video introducing the Digital Strategy for Schools 2027 (Ireland 2022a) or Spain’s presentation and video of the Youth Strategy 2030 (Injuve Spain 2022).

² Online survey of national authorities.

Member state governments also choose to organise conferences and presentation events to raise awareness of their strategies and bring together relevant stakeholders. For example, in 2024, Norway held a National Conference on Curriculum Renewal, which brought together educators, school leaders and policy makers to discuss the implementation and impact of the new curriculums under the Knowledge Promotion 2020 reform (Norway 2024). In Spain, to promote the LOMLOE law, informational sessions and seminars were held, together with webinars and online courses to reach a wider audience (Spain 2020).

Other awareness-raising activities

Numerous initiatives aim to raise awareness of digital citizenship education beyond the policies and strategies outlined in the overview of legislation, policies and practices. These efforts engage educators, students, parents, civil society organisations and policy makers through strategic projects, conferences, workshops and targeted training. Emphasising digital literacy, safe online behaviour and the integration of digital competences into curriculums, these initiatives advance the global recognition and implementation of digital citizenship education. Such awareness-raising strategies can take place across formal, non-formal and informal education settings, adjusting to different learning environments (see Figure 2).

Figure 2. Awareness-raising strategies in formal, non-formal and informal education settings



Source: Authors' own work.

Formal education refers to structured, curriculum-based learning provided within national education systems, delivered by education professionals and leading to certification. Examples in DCE involve integrating DCE principles into national curriculums or developing formal training modules for teachers and students. For instance, the Ministry of Education and Science of Georgia, in partnership with the Communications Commission of Georgia and UNICEF, launched the project Integrating Media Literacy into Formal Education (Georgia 2023). A curriculum, a manual and a training module were developed to train 600 teachers nationwide. In addition, media literacy became an optional subject for students in the 10th grade in September 2023, supported by promotional efforts for resources like "Lessons in media literacy" by Natalya Ingorokva, Georgia's DCE Promoter. In Iceland, the Education Department of Kópavogur has introduced a digital citizenship curriculum to promote responsible internet use (Iceland 2015). The department's website offers resources for all ages, covering topics like online safety and communication, digital identity, media literacy and addressing online hate speech and cyberbullying. Other examples of the introduction of relevant DCE-related competences (e.g. media literacy, online safety, digital citizenship) into formal curriculums are presented in the overview of legislation, policies and practices.

On the other hand, non-formal education refers to any planned activity or programme of education outside the formal education setting. It can operate separately or as a feature of some broader activity and is designed to improve a range of skills and competences. It may involve workshops, campaigns or platforms and typically does not lead to formal certifications. Beyond formal education awareness-raising strategies, non-formal approaches also play a key role in expanding DCE efforts because of their broader scope, flexibility and ability to engage diverse audiences in a more adaptive way.

For instance, in the field of online safety, an important initiative is the Better Internet for Kids strategy, which includes the actions of Safer Internet Centres co-funded by the European Commission. These centres, typically composed of an awareness centre, helpline, hotline and youth panel, operate through a collaborative network supported by Insafe and INHOPE (n.d.). The Safer Internet Centres provide information, advice and assistance to children, parents,

teachers and carers on digital issues, and they combat online child sexual abuse. Most Council of Europe countries have their own Safer Internet Centres. They often involve a wide range of actors, including governmental bodies, educational institutions and private-sector partners, with civil society organisations playing an important role in promoting awareness. These centres play a key role in conducting many of the awareness-raising and networking activities mentioned in this section, enhancing media literacy through conferences, training sessions, resources and workshops. Safer Internet Centres' awareness-raising activities are aligned with the concept of DCE as defined by the Council of Europe. For example, the Irish Safer Internet Centre, Webwise, highlights on its website the 10 themes of digital citizenship identified by the Council of Europe DCE Expert Group (Webwise n.d.a). In addition, Safer Internet Centres are closely linked with the initiative of Safer Internet Day, which has grown beyond its traditional geographic range of the European Union and is now celebrated in more than 180 countries.

In addition to Safer Internet Centres, many governments have opted to establish specialised centres to better structure and deliver awareness-raising activities on DCE-related principles. For example, in 2022 the Dutch Ministry of Education, Culture and Science launched the Expertise Centre for Citizenship Education (Netherlands 2022) and, in 2023, the Expertise Centre for Digital Literacy (Netherlands 2023), both of which provide schools with information and support to advance education in these critical areas.

Comprehensive projects encompassing various awareness-raising activities are being implemented across different regions. Table 5 highlights best practices of projects specifically dedicated to DCE. Following the principles of the DCE Recommendation, countries like Slovenia and Türkiye are collaborating with the Council of Europe to advance the principles of DCE. They engage in initiatives that support online behaviour, well-being online and rights online, including active participation, rights and responsibilities, and privacy and security.

Table 5. Best-practice projects on DCE

Project	Description
<p>Pilot Project on Digital Citizenship Education in Türkiye (2023)</p>	<p>The project, run by the Council of Europe in partnership with the Turkish Ministry of National Education, aims to promote human rights, democracy and fundamental freedoms in schools by empowering students through digital citizenship education. It covers areas such as online behaviour, well-being online and rights online. The initiative involves adapting Council of Europe tools to the Turkish education system, conducting capacity building for educators and raising public awareness.</p> <p>The pilot project targets all members of the school community, including students, teachers, school administrators, parents and caregivers. Its goals are to establish a culture of respect, promote human rights, increase capacity in digital citizenship education and enhance students' ability to navigate the online environment safely and responsibly, building resilience to disinformation and hate speech.</p>
<p>Digital Citizenship in Educational Institutions – Strengthening Competences for a Digital Society in Education (2024)</p>	<p>The Slovenian Ministry of Education has embarked on a two-year pilot project aimed at raising awareness and promoting digital citizenship education. In collaboration with various stakeholders and in consultation with the Council of Europe, this project represents a significant commitment to fostering DCE and its 10 digital domains, in line with Recommendation CM/Rec(2019)10.</p> <p>As part of this initiative, the ministry organised a workshop on 27 February 2024 to inform relevant parties about the Council of Europe's concept of DCE and its associated resources. With insights from Council of Europe experts, workshop participants brainstormed potential joint activities to promote DCE and outlined project ideas for the coming years.</p> <p>In 2024, Slovenia's Ministry of Education launched a tender to promote DCE and develop a reference framework, targeting educators, students, parents, researchers and policy makers. In August 2024, a broad consortium was selected to implement the activities. Led by the Faculty of Education of the University of Ljubljana, the consortium includes the Academic and Research Network of Slovenia and several other faculties, institutes and non-governmental organisations (NGOs) active in this field.</p>

Another relevant project is Little Trainers for Internet 2.0, a programme of the Cyprus Pedagogical Institute, which aims to engage students in educating others about the creative and safe use of the internet. With guidance from teachers and experts, young educators are encouraged to develop action plans, offering online safety recommendations and educating peers, parents and teachers on safe and informed internet use. In addition, Hungary's Bűvészközpont Media Literacy Training Centre has launched the Magic Valley Media Literacy Education Centres programme, offering interactive workshops to support media literacy education for 9 to 16 year olds through experiential learning on conscious media use (Hungary n.d.). Along the same lines, the Slovak Ministry of Education, Research, Development and Youth has introduced DigiPEERS, a voluntary programme for teenagers designed to provide an innovative learning experience, focusing on online safety, social media and critical thinking (Slovakia n.d.).

In addition to embedding DCE-related principles and competences into learning frameworks, countries also host targeted training sessions to enhance online safety for children and young people. For example, in Spain more than 4 000 schools and 81 300 pupils participated in free online safety workshops in 2023, developed in collaboration with the National Institute of Educational Technologies and Teacher Training. Additionally, the 2019 Young Digital Leaders Bulgarian Curriculum, aligned with the Council of Europe's definition of digital citizenship, offers five sessions for students aged 12-15 to help them become critical consumers, resilient citizens, rights experts and digital leaders (Institute for Strategic Dialogue 2019). Beyond the scope of the national Safer Internet Centres, notable initiatives include a training session in North Macedonia for 120 university students focused on empowering them to prevent online risks (North Macedonia 2023), and the Flemish Knowledge Centre for Digital and Media Literacy's Scale of M web page, which offers free teaching materials to promote media wisdom in primary education during a game week (Flanders n.d.). In addition, the Ministry of Education of Azerbaijan, in collaboration with private entities, launched the Safer Internet project to educate students about online threats and inform parents about the dangers their children may face online through awareness-raising meetings (Azerbaijan n.d.).

The Council of Europe's Recommendation CM/Rec(2019)10 defines contextual principles – such as access to digital technology, basic functional and digital literacy skills and a secure technical infrastructure – as essential “preconditions” for digital citizenship. Consequently, in addition to targeted training on online safety, member states also implement broader initiatives aimed at enhancing these contextual principles, particularly digital skills. Most member states of the Council of Europe provide digital-skills training via customised platforms for digital education aimed primarily at students, parents and caregivers. The present study finds that initiatives promoting digital skills are present in almost all Council of Europe member states. For example, the Digital Transformation Education project in Lithuania offers free online classes on digital literacy covering topics such as cybersecurity and digital content education (Lithuania 2022). Poland's Digital Competence Programme includes workshops promoting active technology use and educational projects to foster mindful utilisation of new technologies (Poland 2020). Likewise, Germany has introduced Media Passports (*Medienpass*), comprising six modules that help teachers guide children and youth in responsibly and competently navigating the digital world (European Commission 2024). The development of digital skills is often promoted through innovative initiatives like the All-Ukrainian PlayMath competition, supported by the Ministries of Education and of Digital Transformation (Ukraine n.d.). In 2023, the competition engaged 22 000 students, fostering digital skills and critical thinking through interactive, gamified learning.

To promote the informational principles essential for a democratic culture, initiatives such as conferences and workshops are regularly organised. This is the case of the Artificial Intelligence in STEM Education conference organised in Croatia in collaboration with the European Wergeland Centre and Croatian-based non-profit organisation the Institute for Youth Development and Innovation (Croatia 2023a). The conference promoted DCE approaches in relation to the impact of AI on society and education and emphasised safe and responsible digital interactions aligning with the Council of Europe's Recommendation CM/Rec(2019)10. Similarly, on the sidelines of the General Assembly on Digital Education by the French Ministry of Education, Youth and Sports, the Council of Europe organised in 2020 a video conference titled Digital Citizenship Education Days (Council of Europe 2020a). The videoconference gathered over 300 participants, including policy makers, school principals, educators, parents and academics from 36 European countries. Further examples include the Nordic Digital Citizenship conference on children's rights in the digital world held in Finland in 2023 (Save the Children 2023). The conference explored themes such as AI, privacy and protection – from the perspective of children's rights – and brought together professionals from NGOs, technology companies, governmental institutions and think tanks. Other examples include Poland, which since 2013 has annually conducted an international conference titled Keeping Children and Young People Safe Online, targeting representatives of educational institutions, civil society organisations, public administration, the judiciary and the internet sector (Poland 2024). In the context of the Safer Internet Day, in 2024 Estonia held a thematic conference called Targalt internetis: digitaalne heaolu ja

vaimne tervis (“Smartly on the web: digital well-being and mental health”), for teachers and other professionals working with children as well as for parents (Estonian Safer Internet Centre 2024).

Furthermore, promotional campaigns play a crucial role in raising awareness about DCE principles and digital literacy, helping to educate the public on the importance of digital literacy and responsible technology use. Examples of good practices include the National media literacy campaign in Montenegro – Hajde da biramo šta gledamo (“Let’s Choose What We Watch”) – or the 2023 programme in Hungary called Mobil-e a családom? (“Is My Family Mobile?”) to promote responsible use of electronic devices launched by the National Media and Infocommunications Authority. The Luxembourg Safer Internet Centre’s Bee Secure ran the #Nohateonline campaign during the year 2022/23, offering resources on combating online hate speech (Bee Secure 2022), and in July 2023 Luxembourg’s Ministry for National Education, Children and Youth presented “Not sharing is caring” to raise awareness about violent videos involving young people on social media (Luxembourg 2023a). In most countries that celebrate Safer Internet Day, such as Finland, a media literacy week is held annually, bringing together students, young people and professionals from schools, early education centres, NGOs and beyond (Finland n.d.). For instance, the Finnish Society on Media Education NGO partnered with public actors to create the set of material titled “Viestejä pullossa – Empatiataitoja mediakasvatuksen avulla” (Messages in a bottle – Empathy skills through media education) (Finland 2021). The week features a range of activities including events, campaigns and the release of educational materials, celebrated through seminars, workshops, webinars and public discussions.

CM/Rec(2019)10 recommends providing quality tools such as the DCE Handbook and Internet Literacy Handbook to support formal, informal and non-formal learning. The study findings show that most countries, such as Croatia, Finland, Ireland, Latvia, Lithuania, Luxembourg and Switzerland, among others, are active in producing reports and recommendations to raise awareness of DCE principles. In alignment with this, the Ministry of Education of Luxembourg, together with Trier University (Germany) and the Zentrum für politisch Bildung (Luxembourg), published the handbook “Democracy in schools – Democracy education in the digital society” (Luxembourg 2020b). The handbook is intended for teachers and principals to support them in their teaching to uphold the values of digital citizenship education. Safer Internet Centres often develop dedicated resources to promote online safety and media literacy. For example, Latvia’s Safer Internet Centre has a dedicated web page to provide educational materials on online safety for children and young people, as well as for parents (Latvia n.d.). In addition, the Croatian Safer Internet Centre has an online workbook targeting teachers, professors and experts titled “Smjernice za postupanje u slučajevima elektroničkog nasilja” (Guidelines for dealing with e-violence) (Croatian Safer Internet Centre n.d.). The Irish Safer Internet Centre, Webwise, develops and disseminates resources targeting teachers, children, young people and parents to promote a safer and better use of the internet (Webwise n.d.b). Similarly, the National Platform on Youth and Media of Switzerland publishes a series of brochures on media education as well as leaflets in 17 languages (Switzerland n.d.). These brochures are aimed at parents, teachers and other people who work with children and young people who would like to learn how to promote media skills and how to support young people in everyday media life. In Belgium, Mediawijs (Flemish Knowledge Centre for Digital and Media Literacy), as part of the NieuwsWijsNeuzen (NewsWiseNoses) project, successfully launched the “Child guide”, a guideline for child-centred journalism in times of disinformation. Additionally, the Kritikat teaching package, previously designed for the third grade of primary education, was expanded to include the first and second grades (Mediawijs 2023). To inform reports and recommendations, some countries undertake data collection efforts on DCE-related topics, recognising the importance of identifying new trends and gathering relevant insights to guide the development of future initiatives and projects. For instance, in 2024, the German Safer Internet Centre launched a survey to explore the challenges parents and young people encounter with pornographic content (Klicksafe 2024).

Furthermore, to promote understanding of the DCE principles, Council of Europe member states are promoting several initiatives aimed at creating child-friendly content on digital citizenship education. For example, the Greek Safer Internet Centre has published a set of activity books for safe navigation to equip students of all levels of education with skills for creative, safe and responsible use of digital technologies (Greek Safer Internet Centre n.d.). The Dutch Media Literacy Network launched the MediaMasters initiative aimed at creating awareness among children aged 10 to 12 about potential impacts of (digital) media and social media and how to use the internet responsibly (MediaMasters Netherlands n.d.). Additional examples include the Bosnian Safer Internet Centre, which organises quiz contests on online child safety (Bosnian Safer Internet Centre n.d.). The quiz has an educational character and motivates children to learn about the safe use of digital technologies in a fun way. Similarly, the French Ministry of National Education launched in 2023 the resource named “Le Kit CyberEnJeux” designed to help teachers build a step-by-step teaching sequence on cybersecurity and develop skills in learning through games (France 2023b). In the same year, the French Ministry of Education, in collaboration with the Commission Nationale de l’Informatique et des Libertés (CNIL), launched a new edition of the “Trophées des classes” competition (CNIL 2023). This initiative aims to promote a citizenship approach to the use of digital

technology as part of media and information education, with the CNIL's expertise in data protection ensuring that digital tools and practices are aligned with privacy and security standards.

Informal education strategies are also effective in promoting DCE-related principles, thanks to the personalised and flexible approach to learning they offer. Unlike formal education, which often follows a planned or structured curriculum, informal education happens outside the classroom and arises from daily experiences, interests and social interactions, making it highly relevant to individuals. It includes learning through family, peer groups, museums, extracurricular programmes or exposure to media. One effective way to raise awareness on DCE principles within this context is through interactive activities on social media channels that young people are already familiar with. For example, the Croatian Safer Internet Centre hosted live streams on Instagram, answering parents' questions about video games (Croatian Safer Internet Centre 2025). Similarly, in Belgium, Mediawijs (Flemish Knowledge Centre for Digital and Media Literacy), as part of the NieuwsWijsNeuzen (NewsWiseNoses) project, runs TikTok and Instagram channels that serve as checkpoints for disinformation, featuring fact checks specifically tailored for children (Mediawijs 2023). In addition, the Czech Safer Internet Centre managed the audiovisual project *Marty is Dead*, a television series inspired by real cases of cyberbullying and designed for teenagers and young adults (Czech Safer Internet Centre 2025). The Slovenian Ministry of Education has launched a series of podcasts aimed specifically at parents and carers that cover topics such as cyberbullying, online learning, disinformation, democratic participation and the use of mobile phones in schools, among others (RTV n.d.).

Frameworks for assessing the impact of the DCE Recommendation

The DCE Recommendation encourages member states to assess the impact of the legislation, policies and practices related to DCE at regular intervals. The national strategies, programmes and action plans in the areas of digital transformation, digital education and digital skills identified in the overview of legislation, policies and practices usually include provisions on their implementation, monitoring and evaluation.

In terms of frequency, most of the strategies include a final evaluation, but many also propose intermediate monitoring and evaluation exercises, from progress reports every six months, like the 2022-2025 Digital Agenda Strategy of Albania (Albania 2022a); to annual reports such as the Flemish Youth and Children's Rights Policy Plan 2020-2024 (Flanders 2021), Estonia's 2019-2021 AI Strategy (Estonia 2019b), Luxembourg's initiatives for the digital inclusion of citizens (Luxembourg 2023b), Malta's Digital Education Strategy 2024-2030 (Malta 2024), the Republic of Moldova's Education 2030 strategy (Moldova 2024) and Montenegro's Youth Strategy 2023-2027 (Montenegro 2023). Some evaluations take place every two years – like the Slovak Republic's Strategy for Youth 2021-2028 (Slovakia 2021) and Slovenia's Digital Education Action Plan 2021-2027 (Slovenia 2021) – or every four years – such as Liechtenstein's Education Strategy 2025+ (Liechtenstein 2022) – while others hold mid-term evaluations, such as the Strategy for Digital Croatia 2032 (Croatia 2023b), the Estonian Education Strategy 2021-2035 (Estonia 2021b), the Estonian Digital Agenda 2030 (Estonia 2021a) and the Slovak Republic's Strategy for Youth 2021-2028 (Slovakia 2021).

The assessment of the implementation of the strategies is conducted by different entities depending on the member states. In most countries the strategies are monitored directly by the ministries in charge. For instance, in Belgium the Flemish Youth and Children's Rights Policy Plan 2020-2024 is monitored through the annual reporting of actions of each minister concerned, and on this basis, the mid-term review and a final evaluation will be drawn up by the Minister for Youth (Flanders 2021). In Germany, the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth regularly reports to the Bundestag on the effectiveness of the Youth Protection Act 2021, including evaluations based on collected data and the impact of the measures implemented (Germany 2021). In some countries, the monitoring and evaluation is conducted at the local level. For example, the digital competences included in the New Finnish National Core Curriculum for Early Childhood Education and Care is regularly monitored at local level through the early childhood education and care service providers and local authorities (Finland 2022a).

In many member states, the national strategies are monitored and evaluated by specific steering committees involving different ministries or stakeholders. For example, in Belgium, the Digital Council ensures the monitoring and evaluation of the Digital Wallonia 2019-2024 Strategy (Wallonia 2022). In Estonia, a steering committee evaluates progress towards the objectives of the Education Strategy 2021-2035 (Estonia 2021b), and another steering group monitored the 2019-2020 AI Strategy, composed of representatives of government agencies and key stakeholders (Estonia 2019b). In Germany, the monitoring of the Digital Strategy – Creating Digital Values Together is supported by a round table of state secretaries chaired by the Federal Ministry for Digital and Transport, while an independent scientific analysis will evaluate the impact of the strategy (Germany 2022). In Luxembourg, the National Action Plan for Digital Inclusion is monitored and assessed by the Ministry of Digitalisation with the support of the interministerial

working group for digital inclusion (Luxembourg 2021a). In Malta, the Digital Education Strategy 2024-2030 will be evaluated by the Digital Literacy and Transversal Skills Committee selected by the Ministry of Education, Sport, Youth, Research and Innovation (Malta 2024). Finally, in some countries, the national strategies are evaluated by independent experts. For instance, the Digital Croatia Strategy 2032 will be evaluated by independent experts (Croatia 2023b). In Germany, an independent evaluation of the Digital Strategy 2025 is mandated (Germany 2016).

In terms of the assessment methods, member states often define key performance indicators of the objectives and actions to be monitored. These measures can be based on administrative data, external indices and indicators. According to the responses of national authorities to the study online survey, to monitor developments in relation to digital literacy, some member states rely on the European Union Digital Economy and Society Index (DESI), or take part in international assessments such as the OECD Programme for International Student Assessment (PISA), the Teaching and Learning International Survey (TALIS) and the Programme for the International Assessment of Adult Competencies (PIAAC), or the International Computer and the Information Literacy Study (ICILS). To monitor developments on citizenship education, relevant sources used include the International Civic and Citizenship Education Study (ICCS) and the External Policy Cultural Monitor. In North Macedonia, the national authorities mentioned in the survey that they used the Digital Readiness Assessment, conducted by the United Nations Development Programme, which evaluates the country's accessibility to information technology tools and digital literacy among its citizens.

In addition, the key performance indicators to measure progress on the strategies and policies are also informed by survey or feedback data collected from stakeholders. For example, in Belgium, the five-year ICT Monitor monitors progress of the Flemish strategy Digisprong ("digital jump") through more than 20 indicators, including on infrastructure, nature and frequency of use, computer literacy and perceptions. The impacts of the measures are also assessed qualitatively through a survey of schools, while school inspections evaluate schools annually to cover the ICT component of the reference framework for digital education (Flanders 2020). In Italy, local authorities are asked to fill in a reporting form to assess the implementation of the National Strategy for Digital Skills, which is triangulated with data from other sources such as ISTAT, Eurostat and DESI (Italy 2020). In Bosnia and Herzegovina, the Strategy for the Development of Media and Information Literacy in the Field of Education in the Canton of Sarajevo includes provisions for gathering feedback from students, teachers and other stakeholders to inform adjustments (Bosnia and Herzegovina 2022). In Ireland, the assessment of the Digital Strategy for Schools to 2027 includes consultation of schools and industry groups (Ireland 2022a). In Norway, feedback from schools and municipalities is collected to measure progress and impact of the Knowledge Promotion 2020 strategy (Norway 2023). In the Republic of Moldova, the evaluation of the Education 2030 strategy involves sociological surveys on the quality of the implementation of the programme every two to three years and the organisation of a system-wide teachers' congress every four years (Moldova 2024).

Some of the self-evaluations relate to the European Union DigComp framework. For example, in Austria, the Digital Skills Barometer measures digital skills in the country based on the Digital Competence Framework for Austria, with a self-assessment and knowledge-based questions (Fit4internet 2022). In France, the auto-evaluation certificate Pix, based on the European DigComp reference framework, became compulsory from the school year 2024/25 for students to certify that they received awareness raising on digital competences, data protection and cyberbullying (France 2023c).

Some member states have established or plan to set up observatories or dashboards to publish information on the progress of the strategies or on key indicators. Namely, in Portugal, the Digital Skills Observatory is an instrument for monitoring, processing data and analysing results on the evolution of the population's digital skills, which helps monitor the results of the Digital Skills 2030 strategy (Portugal 2019). In Italy, the Digital School Observatory, introduced with the National Digital School Plan, monitors the didactic, technological and innovation progress of the school system, collecting data on the use of digital devices in everyday teaching, connectivity, teaching methodologies and innovative learning environments as well as data related to the digital curriculum (Italy n.d.). Similarly, Greece is in the process of creating a Digital Skills Observatory to monitor policies and training actions for the development of digital competences of citizens and professionals in the country (Greece 2023). In Belgium, the dashboard of Digital Wallonia shows the progress of the actions of the strategy with their objectives, budget allocated and beneficiaries (Wallonia n.d.). In France, the Strategy for Digital Education 2023-2027 foresees the creation of a dashboard on digital education, built with willing stakeholders (France 2023c). Similarly, the Republic of Moldova plans to create a dashboard to reflect progress of the Digital Transformation Strategy 2030 (Moldova 2023).

This review found limited available publications of evaluations or monitoring reports of the identified national strategies. The reports available sometimes pre-date the introduction of the strategies. Among the recent evaluations, an example is the mid-term review of the Flemish Youth and Children's Rights Policy Plan 2020-2024 published in

2022 (Flanders 2022) and the final report published in 2024 (Flanders 2024). In addition, the latest study of the Flemish ICT Monitor, which monitors progress of the Digisprong strategy through more than 20 indicators, dates from 2023 (Knowledge Centre Digisprong 2024). Another one is the 2022 monitoring report of the Italian National Strategy for Digital Skills (Italy 2022). In Germany, the Kultusministerkonferenz committee supports the implementation of the strategy titled Education in the Digital World and presents an annual progress report on the implementation of the strategy within the German *Länder*, the latest version dating from 2023 (Germany 2023). In Moldova, the 2023 annual report of the Ministry of Education is publicly available, reporting information on its actions in general, including on digital education (Moldova 2024). In Norway, several evaluations have been conducted to assess the impact of the curriculum change from the Knowledge Promotion 2020 strategy (Norway n.d.b).

For more details on the involvement of stakeholders in the evaluation of national strategies relevant for DCE, see also below.

Stakeholder participation

Stakeholder involvement in the design, implementation and evaluation

The DCE Recommendation encourages the governments of member states to “involve all relevant stakeholders in the design, implementation and evaluation of digital citizenship education legislation, policies and practices, including through the provision of appropriate resources and training”.

While this study has found limited implementation of the DCE Recommendation and related stakeholder participation, several member states have engaged a variety of in-country stakeholders in the design and implementation of other digital education or digital citizenship activities and policies identified in the overview of legislation, policies and practices.

Design

Stakeholder involvement in the design of DCE policies varies significantly across member states. In many cases, governments engage a combination of ministries, educational institutions, NGOs and private-sector actors to formulate strategies that reflect diverse perspectives and needs.

The main stakeholders were included in the design of digital education policies through public consultations, which took place in several formats.

In many cases, public consultations took place through in-person events and forums, which enabled a co-creative and consultative process. For instance, for the Iceland Education Policy 2030, ministries organised a series of meetings throughout 2018 and 2019 with representatives from municipalities, parents, students, teachers, school administrators, various interest groups and the business community (OECD 2021). In Albania, the development process of the 2022-2025 Digital Strategy involved multiple stakeholders – both governmental and non-governmental – and including non-formal education (Albania 2022b). Similarly, there was a public consultation in Bulgaria for the Digital Bulgaria 2025 National Programme (Bulgaria 2019). The National ICT Strategy 2021-2025 in North Macedonia was designed with input from stakeholders. During the drafting process, the Ministry of Information Society and Administration facilitated public consultations and inclusive discussions.³

Mainly because of the Covid-19 pandemic, in several countries it was necessary to host consultations online. This was the case in Malta for the development of the Digital Education Strategy 2024-2030 (Malta 2024). In the United Kingdom, for the preparation of the Online Safety Act 2023, the Office of Communications conducted a 15-week consultation on codes of practice relating to illegal harms online (OFCOM 2023) and a 10-week consultation on codes of practice relating to the online protection of children (OFCOM 2024), including consultation of children.

In a few countries, working groups composed of experts and/or key stakeholders were created with the task of facilitating the design process. For example, in the Czech Republic, an external group composed of eight members prepared guidelines for the Education Policy Strategy 2030. This work was done ahead of the public consultation, and then refined in later online conferences and discussions with as many stakeholders as possible (Czech Republic 2020). In Estonia, the Education Strategy 2021–2035 is based on studies and analyses, vision documents prepared by experts, the Estonia 2035 Strategy, the United Nations Agenda 2030 Sustainable Development Goals, the results of the work of the education strategy working groups, feedback and input gathered through public consultations and engagement events, and the results of the Estonian Lifelong Learning Strategy 2020 and its mid-term evaluation (Estonia 2021 b).

3. Online survey of national authorities.

Central government also takes charge in some cases. The National Strategy for Digital Skills in Italy was drafted jointly with the help of ministries; regions; provinces; municipalities; universities; research institutes; companies; professionals; the national public broadcaster; associations and various public-sector organisations; organisations belonging to the National Coalition; and with informal exchanges with the European Commission. This was done under the direction of the Technical Steering Committee known as “Repubblica Digitale”, along with co-ordination by the Department for Digital Transformation – Presidency of the Council of Ministers on behalf of the Minister for Technological Innovation and Digitalisation (Italy 2020). In Armenia, the Prime Minister’s office and various NGOs participated in developing the 2022 Law on Approving the State Programme for the Development of Education (Armenia 2021b).

Civil society is often active in such working groups. An example is the Digital Transformation Book (2020-2025) in Greece (Greece 2020b). The consultation with stakeholders from the public and private sector, the research and academic communities and civil society had an open and dynamic character. In fact, it will continue to be co-shaped and updated annually in co-operation with the competent bodies of the public administration and after consultation with civil society. In Austria, Zentrum Polis, an NGO focusing on political-citizenship education, actively contributes to Austria’s National Action Plan by providing educational resources for teachers and incorporating digital citizenship and media literacy into their initiatives (Zentrum Polis n.d.).

Decentralisation requires an inclusive approach involving more local stakeholders. In Germany, the Education in the Digital World strategy (Germany 2023) involved federal ministries, *Länder* governments and NGOs during its formulation, ensuring alignment with regional education policies. France’s Digital Education Strategy relied on 40 propositions from the general forum on digital education – including in non-formal settings, the 12 commitments from the Grenelle on Education and the further exchanges with stakeholders in 2022 (France 2023c).

While many countries incorporate data protection and cybersecurity into their digitalisation strategies, specific details on stakeholder involvement during the design phase are often limited. In some cases, data protection authorities play a role. For instance, the French Data Protection Authority contributed to developing the Charter for Digital Culture and Citizenship Education (France 2023a). Similarly, in Germany, data protection working groups participate in shaping digitalisation policies. However, the extent and nature of their involvement across different countries requires further investigation.

Implementation

Member states employ diverse models of co-operation to ensure the practical application of DCE principles in schools and beyond. In several member states, the implementation of policies and frameworks saw the involvement, engagement and participation of in-country stakeholders.

In some cases, stakeholders were engaged formally through the creation of national coalitions or consortiums for overseeing the implementation of strategies. For example, in North Macedonia, the ICT Forum, government ministries, university faculties, telecommunications operators, along with ICT companies, training organisations and NGOs, are part of the coalition overseeing the implementation of North Macedonia’s National ICT Strategy for 2021-2025 (North Macedonia 2021). For the Digital Slovenia 2030 strategy (Slovenia 2023), a Strategic Council for Digital Transformation has been established as a government-appointed consultative body responsible for overseeing the implementation of the digital transformation strategy. This council includes representatives from the economy, NGOs, academia and research, and local communities. Slovenia established a consortium of selected partners including civil society organisations, public institutions, education bodies tasked with the launch of the two-year pilot project on DCE which met during an in-person meeting on 27 February 2024 hosted by the Ministry of Education.

In most cases, the ministries of education are the bodies responsible for the implementation of the strategies, which they carry out through collaboration with education providers, school leaders and teachers, local education authorities, and non-formal education actors. For example, in Türkiye, the Ministry of National Education oversees the implementation of Türkiye’s Education Vision 2023 and the Turkish National Curriculum for Primary and Secondary Schools, which are executed by the provincial and district education directorates at the local level, whereas school administrations and teachers are responsible for the diffusion of the new curriculum and education practices (OECD 2019b). This is also the case for the National Digital Skills Strategy (2023-2026) in Slovakia, which is co-ordinated by the government but implemented in co-operation with several entities: academic experts, private-sector stakeholders, municipalities and civil and business associations (Slovakia 2023). Specialised government units might also act as hubs for collaboration across central government entities. For instance, the Central State Office for the Development of the Digital Society leads the implementation of the Digital Croatia Strategy. This office collaborates with various ministries, such as Education and Science; Labour and Pension System, Family and Social Policy; Sea, Transport and Infrastructure; Justice and Public Administration; Media and Culture; and Economy and Sustainable Development.

In other instances, specific bodies are appointed as responsible for implementation, such as the National Communications Authority in Portugal, tasked with the enforcement of the European Union Digital Services Act 2024 (Cuatrecasas 2024). In Italy, the National Strategy for Digital Skills is implemented by the Ministry of Education, the Ministry of Universities and Research, the Ministry of Economic Development, and the Ministry for Public Administration (Italy 2020). The strategy is implemented in co-operation with Repubblica Digitale, a multistakeholder alliance that is part of the European Digital Skills and Jobs Coalition, which includes over 120 organisations involved in the promotion of over 130 initiatives. In Bosnia and Herzegovina, education institutions and community organisations have taken part in the implementation of the Strategy for the Development of Media and Information Literacy (Bosnia and Herzegovina 2022).

In Luxembourg, within the framework of the National Action Plan for Digital Inclusion (2021), the Ministry of Digitalisation launched a web portal dedicated to digital inclusion in 2022 that collects responses to calls for the financing of pilot projects promoting digital inclusion in the country. The portal is aimed at NGOs and other non-profit bodies (Luxembourg 2023b).

Crucially, there is little evidence that teacher training institutions are actively engaged in implementation, rather than passively adopting guidelines. One of the exceptions is Norway, where DCE-related principles are also a part of the framework for teachers' professional digital competences, developed by the Directorate for Education and Training in collaboration with teacher training institutions, and are widely used in both initial and in-service teacher training. In Spain, Educa en digital provides free courses by the National Institute of Educational Technologies and Teacher Training with multiple initiatives around digital training (INTEF n.d.).

Monitoring and evaluation

The monitoring and evaluation of DCE-related initiatives frequently involves ministries, particularly those responsible for education, digitalisation and youth. In many countries, these ministries directly monitor the progress of DCE-related strategies. For example, in Belgium, for the Flemish Youth and Children's Rights Policy Plan, each minister concerned reports annually on the actions taken, forming the basis for a mid-term review and final evaluation conducted by the Minister for Youth (Flanders 2021). Similarly, the German Federal Ministry for Family Affairs, Senior Citizens, Women and Youth regularly reports to the Bundestag on the effectiveness of the Youth Protection Act 2021, including its impact. However, this approach risks excluding non-formal education.

Steering committees, often comprising representatives from different ministries and stakeholders, play a crucial role in overseeing DCE strategies in several countries. In Estonia, separate steering committees are responsible for the Education Strategy 2021-2035 (Estonia 2021b) and the 2019-2020 AI Strategy (Estonia 2019b). These committees typically involve stakeholders from various sectors, including government agencies and key actors in the field. In Denmark, a council consisting of experts and representatives from both the public and private sectors is tasked with monitoring the implementation and advising the government on new digital trends and further digitalisation efforts in line with the National Strategy for Digitalisation (2022) (Denmark 2022).

Local authorities and education providers are often involved in the implementation and monitoring of DCE-related initiatives at the local level. The digital competences integrated into the New Finnish National Core Curriculum for Early Childhood Education and Care are monitored by local authorities and early childhood education and care service providers (Finland 2022a). This localised approach allows for adjustments and improvements based on specific regional needs and challenges.

Stakeholders participate in monitoring and evaluation through various other mechanisms, including direct reporting, participation in steering committees, provision of feedback and participation in surveys. Regular reporting on the progress of actions and the achievement of objectives is a common method. Surveys and feedback mechanisms, like those used in Norway (Norway n.d.a), help gauge the impact of strategies from the perspective of those involved in their implementation. Generazioni Connesse, a digital-skills and jobs initiative in Italy, is being evaluated by La Sapienza University in Rome (Italian Safer Internet Centre n.d.). In Finland, the regular assessment and monitoring of national policies and programmes is done by the Finnish National Agency for Education, which produces reports summarising the implementation progress and educational outcomes in the various regions of Finland.

Independent experts or agencies are also engaged in the evaluation of DCE-related strategies in certain countries. The Digital Croatia Strategy 2032, for example, undergoes evaluation by independent experts (Croatia 2023b). In addition, stakeholders involved in the impact assessment are the Central State Office for the Development of Digital Society and the European Commission (through DESI). Germany mandates an independent scientific evaluation of the impact of its Digital Strategy – Creating Digital Values Together 2022 to assess its effectiveness and ensure that the goals of digital transformation and innovation are being achieved (Germany 2022). In

Sweden, in 2021, the Agency for Public Management was given the assignment of evaluating the monitoring system of the national youth policy. The assignment was reported to the Ministry of Culture in March 2022 (Sweden 2021). In Montenegro, the impact of the projects and initiatives on the quality of both formal and non-formal education has been assessed through the external evaluation conducted by the Department for Quality Assurance of the Bureau for Education Services, which oversees the quality of education.⁴

Frameworks for co-operation between public, private and civil sectors and education institutions

The DCE Recommendation encourages the governments of member states to “support the creation of frameworks for co-operation between public, private and civil sectors and education institutions, and ensure that they align with relevant national, European and international standards and uphold the right of citizens to equitable quality education”. Member states have implemented diverse frameworks to foster collaboration among public institutions, private entities and civil society organisations, aiming to advance DCE principles. These partnerships demonstrate the importance of cross-sector engagement in addressing digital literacy, media education and broader competences necessary for active digital participation.

National digital-alliance coalitions often serve as the backbone for DCE frameworks, bringing together diverse stakeholders to promote digital literacy and inclusion. In particular, the European Union’s national coalitions for digital skills and jobs, which are connected to the European Union Digital Skills and Jobs Coalition (European Commission n.d.), provide a good example of implementation of digital-skills programmes and initiatives following a network and collaborative approach. For instance, Lithuania’s National Digital Coalition collaborates with public institutions, NGOs and private-sector companies under the European Digital Skills and Jobs Coalition (National Digital Coalition 2020). This initiative focuses on improving digital skills, bridging the digital divide and supporting vulnerable populations by promoting programmes like Digital Qualification to enhance teachers’ digital skills at all educational levels.

The frameworks established often involve a diverse array of stakeholders, ensuring a comprehensive approach to digital citizenship education. These stakeholders include government bodies, educational institutions, NGOs and private-sector partners, all working in unison to promote inclusive and effective educational practices. Another relevant example is the Better Internet for Kids initiative, co-funded by the European Commission, which involves Safer Internet Centres across 32 member and non-member states. These centres operate through a network of public-private partnerships to provide information, advice and assistance on digital issues, particularly focusing on online safety for children (see also the section on actions to promote the DCE Recommendation in formal, non-formal and informal education settings).

For instance, in the Czech Safer Internet Centre, the Ministry of Education, Youth and Sports provides policy direction and funding, while NGOs like the Czech Council of Children and Youth and Safety Line offer expertise in online safety and media literacy (Czech Safer Internet Centre 2025). In addition, the National Pedagogical Institute of the Czech Republic supports teacher training and curriculum, which is key for integrating digital citizenship into the broader education system. Similarly, the Slovenian Safer Internet Centre (n.d.) is overseen by the Ministry of Education, Science and Sport, with research and expert input provided by the Faculty of Social Sciences at the University of Ljubljana. The university’s involvement strengthens the initiative’s research base and its capacity for evidence-informed programme development and evaluation.

The Italian Safer Internet Centre (n.d.), Connected Generations, is co-ordinated by the Ministry of Education, Universities and Research and involves partners from various sectors. It collaborates with the Ministry of the Interior’s Postal and Communications Police and the Authority for Childhood and Adolescence in the public sector, Save the Children Italia Onlus and Sos Il Telefono Azzurro in civil society, the University of Florence and the University of Rome La Sapienza in academia, and Skuola.net and the EDI co-operative in the private sector. In addition, Connected Generations offers an online platform with resources – produced by the different stakeholders – for schools to guide their students on how to become internet savvy.

Beyond national digital-skills coalitions and Safer Internet Centres, it is worth highlighting sikkerdigital.dk as an example of a Danish government initiative that promotes digital citizenship and cybersecurity awareness among citizens, businesses and public institutions (Denmark n.d.). The initiative exemplifies multiparty involvement, partnering with stakeholders such as the Datatilsynet (Data Protection Agency) in the public sector, Forbrugerrådet Tænk (the Consumer Council Think in civil society, and Finans Danmark (Finance Denmark) in the private sector, among others.

4. Online survey of national authorities.

Another initiative, in Germany, the *Germildung Digitalisierung* (Education Digitalisation Forum) convenes government representatives, private foundations and NGOs to develop scalable digital education initiatives (Educa 2021).

In several member states, public-private partnerships support the implementation of DCE-related initiatives and programmes. For example, in Ukraine, Google launched the Child Safety on the Internet platform in partnership with the Ministry of Education and Science in June 2024 (Ukraine 2020). This programme features guides for students, parents and teachers on media literacy and internet safety, emphasising critical thinking and ethical behaviour in digital spaces. The INCoDe 2030 initiative in Portugal leverages partnerships with technology firms and educational institutions to implement cross-sectoral science, technology, engineering and mathematics education and digital citizenship projects (Portugal 2017b). Targeted training programmes for teachers and students ensure that technological innovations are effectively integrated into national education frameworks, promoting equitable access to resources.

In some cases, the private sector plays a role in digital education implementation. In Estonia, the *ProgeTiiger* programme engages private tech companies to provide coding and digital-skills training for students and teachers (Estonia n.d.). Bulgaria is the first country where the company Ericsson is implementing its global 5G University programme as an optional subject in the curriculum of third- and fourth-year bachelor's students, as well as first-year master's students. It provides a 64-hour in-depth training on 5G technology and standards (Ericsson 2022).

Elsewhere, technology giants such as Microsoft, Google and Vodafone have partnered with local authorities for the diffusion of digital and digital civic skills among the population (e.g. in Azerbaijan, Italy and Malta). For instance, Microsoft collaborates with various stakeholders to implement the Digital Civility Index in several member states (France, Germany, Italy, United Kingdom), including digital-safety organisations, educational institutions, governments and civil society groups. The aim is to promote safer, more respectful online interactions by engaging with experts and organisations across Europe to boost awareness and education about online civic values. For example, Google is offering digital training in Italy, where it provides free training to teachers, students and the general public on digital skills and DCE with the collaboration of private foundations, consumer organisations and police authorities (Google Digital Training n.d.). In Greece, the Vodafone Foundation's Generation Next initiative programmes, delivered in partnership with charities and NGOs, aim to help one million learners develop knowledge and skills in using digital technologies, thanks to partnership with local schools (Vodafone 2021).

Collaborations with civil society organisations and NGOs also play a crucial role in promoting DCE. In Bulgaria, the Media Literacy Coalition partners with public institutions to advance media literacy initiatives (Bulgarian Media Literacy Coalition 2024). In the Czech Republic, the Czech Council of Children and Youth (n.d.) incorporates media literacy and online safety into its programmes. In Romania, the Ministry of Education partners with *Centrul de Jurnalism Independent* to integrate media education into secondary schools (Media Education Programme n.d.). In Belgium, *Mediawijs.be* in the Flemish community functions as an expertise centre for media education and offers resources, training and projects related to digital citizenship, working with schools, libraries, youth organisations and other partners. In the United Kingdom, *Shout Out UK*, a non-partisan social enterprise, runs bespoke media and political literacy programmes and campaigns that support beneficiaries' understanding of and engagement with their democracy, confidence, emotional resilience and critical thinking (Shout Out n.d.).

Smaller, more local civil society organisations play a role too: for example, in France, associations like *Class'Code* and *Les Intrépides de la Tech* work with the Ministries of Culture and of Education to promote digital skills and citizenship through educational programmes and initiatives. This demonstrates a framework for co-operation between government and civil society (France n.d.).

Civil society might also operate within an overseas aid framework. In North Macedonia, IREX, an international development organisation, implements the *YouThink Media Literacy Program* in partnership with North Macedonia's Ministry of Education (USAID and IREX 2021). This programme focuses on integrating media literacy and critical thinking into formal and non-formal education settings.

Academic institutions are integral to DCE implementation by conducting research, developing educational materials and training educators. For instance, in Croatia, the *Croatian Academic and Research Network* (n.d.), established by the government, enhances digital literacy among students and teachers through digital services and resources. In Georgia, the *Kutaisi International University* integrates digital citizenship education into its curriculum through various programmes and courses (Kutaisi International University 2023). The university collaborates with international partners in offering training in digital skills, including a *Certified Ethical Hacker* course that aims to enhance students' understanding of cybersecurity and ethical online behaviour.

These co-operation frameworks are typically designed to align with established standards at national, European or international level for equitable, quality education. Based on the desk research and the validation survey with national authorities, this study has found that most initiatives align first and foremost with national

standards. For example, while Germany’s federal system grants educational sovereignty to individual *Länder*, national authorities confirm that *Länder*-specific standards for equitable quality education are grounded in the Constitution of Germany. Alignment with international standards is illustrated by the references to existing international frameworks and standards, such as those from UNICEF, the OECD and the Council of Europe, which provide benchmarks for quality and inclusion in educational initiatives. For example, the Norwegian Directorate for Education and Training aligns with international standards set by the OECD, participating in international evaluations and research collaborations to ensure quality education. For instance, the publication “The Norwegian education mirror 2022” (Norway 2022) explicitly refers to OECD guidelines and standards. In Ukraine, various initiatives align with European Union standards, including the Digital Competence Framework for Teachers and Citizens. Partnerships with organisations like the United Nations Development Programme and the German Society for International Cooperation indicate a focus on global best practices.⁵

Cybersecurity and data protection are rarely cited as key components of frameworks. Multistakeholder platforms or coalitions to address online safety may involve data protection and cybersecurity at times. For instance, the Portuguese National Cybersecurity Centre, which co-ordinates the Safer Internet Centre, plays a key role in developing and implementing policies and guidelines related to data protection and cybersecurity in the context of digital citizenship education (Portuguese Safer Internet Centre n.d.).

Table 6 presents a few examples of frameworks for co-operation that make reference to the DCE Recommendation and material of the Council of Europe.

Table 6. Best-practice examples of frameworks for co-operation

Initiative	Description of partnership
AUSTRIA Zentrum polis	The Austrian Federal Ministry of Education, Science and Research provides funding and sets the policy context for violence prevention and digital citizenship education. NGOs contribute expertise on gender-based violence and practical experience working with affected communities. This collaboration leverages the strengths of both sectors: the ministry’s authority and resources are combined with NGOs’ specialised knowledge and community connections to enhance the initiative’s impact and reach within target populations. This initiative directly references the DCE Recommendation.
IRELAND Webwise Parents Hub, Youth Hub and OIDE initiatives	The Department of Education and the Department of Children, Equality, Disability, Integration and Youth provide policy guidance and funding. NGOs like CyberSafeIreland and SpunOut.ie specialise in youth outreach and digital well-being issues. Teachers are responsible for programme delivery and integration in school settings. The involvement of specialist NGOs likely enhances the quality of resources and programmes, while the government departments provide institutional support and legitimacy. This initiative directly references the DCE Recommendation.

By fostering these co-operative frameworks, member states not only enhance the effectiveness of their educational systems but also ensure they are well-equipped to address the evolving demands of digital citizenship. This collaborative approach is essential for creating a resilient and inclusive educational landscape that benefits all citizens, preparing them to thrive in an increasingly digital world.

Member states’ participation in frameworks for international co-operation

The DCE Recommendation encourages the governments of member states to “pursue and encourage co-operation between the Council of Europe and other international organisations in designing and implementing strategies, policies, programmes, research and other projects on digital citizenship education and on the use of digital technologies in education, and share good practices on an ongoing basis, pedagogical innovations and educational resources”. The DCE Recommendation specifies that co-operation at the international level is an important dimension in the development of DCE.

5. Online survey of national authorities.

International co-operation frameworks linked to the Council of Europe

The Council of Europe DCE Promoters' Network supports the implementation and monitoring of DCE activities, while raising awareness in different countries. It seeks to advance DCE in schools and other non-formal and/or informal learning contexts and to promote it at local, regional and national levels. The network is composed of representatives of public authorities, higher education institutions and affiliated institutions from 28 countries. The latest mandate of the network, valid from 1 June 2023 until 31 May 2026, encompasses a broad range of activities. These include policy and curriculum development, teacher education and training, project development and implementation, awareness raising and dissemination, monitoring and evaluation (including impact assessment), and research. The DCE Recommendation encourages member states "to use the information channels of the Council of Europe to support the sharing and compilation of data to assist in mapping the implementation of the DCE framework". Countries within the DCE Promoters' Network are actively participating in these efforts by sharing projects and good practices on the Council of Europe's DCE web page, contributing to the broader objectives of the DCE Recommendation.

In addition to active involvement in the DCE Promoters' Network, numerous countries are collaborating with the Council of Europe in the field of DCE. In October 2019, 10 countries took part in the DCE School Project (2019/20), selecting schools willing to develop DCE activities. The main outcomes of the project included disseminating the DCE Handbook, increasing the capacity of teachers, integrating the DCE trainers' pack into in-service teacher training systems, developing a democratic school culture, encouraging experience exchange among participating schools and disseminating examples of good practice. A total of 48 schools agreed to participate, involving more than 35 000 students and 3 000 teachers. The project faced setbacks due to the Covid-19 pandemic, but many activities were still carried out in countries including France, Portugal, Slovenia, Türkiye and Ukraine. All areas of DCE were covered, with some schools focusing on media and information literacy, online piracy, identity theft, cyberbullying, online etiquette, digital well-being and digital-diet tips. For instance, a Portuguese school developed the project Digital Bridges with Njegos Primary School (Kotor, Montenegro), which involved eighth-grade students working together through video meetings to create a set of digital teamwork rules.

More examples of collaboration with the Council of Europe within the domain of DCE include pilot projects on DCE in Türkiye and in Slovenia (for more information, refer to the section on actions to promote the DCE Recommendation in formal, non-formal and informal education settings). Similarly, Lithuania, in co-operation with the Council of Europe and the European Wergeland Centre, has launched the project titled A Virtual School of Citizenship to provide an open-access, interactive website with teaching resources, to raise awareness among teachers about enhancing citizenship competences and to facilitate best-practice exchanges (European Wergeland Centre n.d.). Within the domain of media literacy, Bosnia and Herzegovina collaborated with the Council of Europe on the Media and Information Literacy: for Human Rights and More Democracy project from 2020 to 2022 (Council of Europe 2020b).

The Council of Europe Recommendation CM/Rec(2019)10 encourages governments to integrate DCE activities with initiatives such as the Reference Framework of Competences for Democratic Culture and existing international tools. This approach helps prevent overburdening education professionals and school staff. The competences for democratic culture serve as a foundation for integrating digital citizenship education into classroom settings. Accordingly, the publication "Contextualising competences for democratic culture in digital citizenship education" has been produced to support DCE integration (Council of Europe 2024a). Within the domain of the Reference Framework of Competences for Democratic Culture, it is worth highlighting several projects promoted by the Council of Europe such as Strengthening Democratic Citizenship Education in Albania (Council of Europe 2024d), Education for Democracy in the Republic of Moldova II (Council of Europe Office in Chisinau n.d.) and Strengthening Democratic Culture in Basic Education in Turkey (Council of Europe 2022a). Armenia, Azerbaijan, Georgia, the Republic of Moldova and Ukraine are also involved in the Council of Europe project Promoting Human Rights Education and Democratic Citizenship (Council of Europe n.d.). The European Union and the Council of Europe are currently implementing the Horizontal Facility III project in the Western Balkans and Türkiye. Specifically, this initiative encompasses the Quality Education for All projects in Bosnia and Herzegovina, Montenegro and Serbia (Council of Europe 2024c).

In partnership with the Council of Europe, the French Ministry of National Education, Youth and Sports hosted the Digital Citizenship Education Days videoconference in 2020. The event focused on the presentation of the Council of Europe's concept of digital citizenship education and impact on the use of technology in education (Council of Europe 2020a). Croatia organised in 2023 the AI in STEM Education conference in co-operation with the Council of Europe (European Wergeland Centre 2023). The conference featured the presentation of the

Digital citizenship education handbook as well as the DCE online courses. Additionally, Azerbaijan conducted in 2021 a training session with the Council of Europe, aimed at students, focusing on digital media literacy and combating disinformation.

The DCE Recommendation also encourages member states to take up and promote the European Year of Digital Citizenship Education 2025. On 29 September 2023, during the 26th session of the Council of Europe Standing Conference of Ministers of Education, the Ministers of Education declared 2025 as the European Year of Digital Citizenship Education (Council of Europe 2025). This study has found that several countries are actively engaging in the European Year of DCE 2025, by developing targeted initiatives and fostering cross-sector collaborations.⁶ Countries, such as France via the Ministry of Education's official web page, are already actively promoting the goals of this initiative. In addition, according to the national authorities responding to the online survey, the Slovak National Institute of Education plans to create for the European Year of DCE 2025 a network for digital citizenship, include relevant resources in the 2024/25 school guidelines and organise training programmes, such as webinars and conferences. Austria has published an article outlining plans for the European Year of DCE 2025, including the Political Education Action Days in May 2025, focused on democracy and digitalisation, organised by Zentrum Polis.⁷ Starting in January 2025, Zentrum Polis will also publish monthly themes aligned with DCE domains. Furthermore, according to the national authorities in the online survey, Iceland expects the second action plan of its Education Policy 2030 to include key actions on DCE stemming from its participation in the European Year of DCE 2025. Similarly, Italy is planning a strategy to promote DCE through awareness initiatives, training programmes and interactive activities, engaging educators, training hubs and school communities, while adapting Council of Europe materials.

Other international co-operation frameworks

The research team for this study has identified three main aspects of government participation in international co-operation frameworks beyond the Council of Europe-related initiatives: active expert groups and networks, ongoing projects of international co-operation, and other collaborative platforms such as conferences, workshops and training sessions.

Expert groups, research hubs and other international networks play a crucial role in fostering exchanges and collaboration among member states in the realm of DCE. Their efforts aim to raise the visibility of "sense-making practices" and facilitate the creation of a comprehensive repository of knowledge and resources associated with DCE.

At the European Union level, the European Schoolnet aims to enhance education through the effective integration of technology and innovation in teaching and learning. It supports the implementation of the Better Internet for Kids strategy and engages in several projects related to digital citizenship, innovation, professional development and school networking (European Schoolnet n.d.a). Within the European Schoolnet, the Digital Citizenship Working Group seeks to develop a strategic framework for digital citizenship and provides a platform for exchanging ideas, identifying best practices and addressing challenges (European Schoolnet n.d.b).

In the field of online safety at the European Union level, all 27 European Union member states plus Norway and Iceland are part of the Expert Group on Safer Internet for Children, which aims to inform the European Commission on the challenges and needs arising at the national and European levels in the context of online child safety (European Commission 2025a). Similarly, the United Nations Internet Governance Forum brings together various stakeholder groups including governments, private-sector and civil society organisations to discuss digital public policy (UN Internet Governance Forum n.d.). The Swiss Internet Governance Forum (n.d.), established in 2015 as a national spin-off of the global initiative, operates independently and brings together stakeholders to discuss internet governance and related issues.

Government representatives from the Czech Republic, Denmark, Estonia, Finland, Greece, Iceland, the Netherlands and Sweden participate in the Internet Governance Forum. In addition, the International Telecommunication Union has a working group on child online protection, of which Azerbaijan and Italy are vice-chairs (ITU 2025).

In the realm of digital education, the European Commission Expert Group on Digital Education Content aims to support the development of guidelines and quality requirements for accessible, well-designed and high-quality digital education content (European Commission 2025b). Its scope is limited, with the participation of only 13

6. It is important to note that no specific questions on activities planned by member states during the European Year of DCE 2025 were included in the online survey. So, the examples provided in this report are not exhaustive but rather illustrative of some of the initiatives underway.

7. Medienimpulse 2025: European Year of Digital Citizenship Education [#DCEY2025] [in German], available at www.politik-lernen.at/dce_2025.

European Union member states. Similarly, the European Commission Working Group on Digital Education: Learning, Teaching and Assessment (European Commission 2025c) aims to promote mutual learning on policy reform of national education systems with a view to contributing to the achievement of the European Education Area by 2025 and the Digital Education Action Plan (2021-2027). The initiative includes all European Union member states, as well as third countries such as Albania, Bosnia and Herzegovina, Iceland, Liechtenstein, Moldova, North Macedonia, Norway, Serbia, Türkiye and Ukraine.

Furthermore, during the Transforming Education Summit 2022 (United Nations 2022), UNICEF and UNESCO launched Gateways to Public Digital Learning, a multipartner initiative that aims to create and strengthen digital learning platforms and content. Among the Council of Europe member states, Bulgaria and Latvia were among the first to join.

Within the domain of media literacy, it is worth noting the Expert Group on Media Literacy of the European Commission, composed of the 27 European Union member state (European Commission 2025d) and the OECD Expert Group on Governance Responses to Mis- and Disinformation. The OECD group, which includes various Council of Europe members in its steering group (Belgium, Finland, France, Greece, Lithuania, Luxembourg and Norway), is a research hub that conducts data collection and analysis activities, facilitates dialogue and information sharing. The European Digital Media Observatory is composed of 14 existing national or multinational hubs that work to detect and analyse disinformation activities, organise media literacy activities and provide support to national authorities for the monitoring of online-platform policies and the digital media ecosystem (EDMO n.d.).

Regarding citizenship education, it is noteworthy to mention the Eastern European Network for Citizenship Education, the co-ordination council of which is composed of Armenia, Azerbaijan, Georgia, Moldova and Ukraine (EENCE n.d.). The Networking European Citizenship Education platform is a multistakeholder network for civic educators to connect, learn and grow. Institutional members include the German Federal Agency for Civic Education and the Unit for Citizenship within the Austrian Federal Ministry of Education, Science and Research.

Table 7 presents the main expert groups within the domains of online safety, media literacy and digital education, and the respective Council of Europe member states.

Table 7. Frameworks for international co-operation – Active expert groups

Topic	Initiative	Participants from Council of Europe member states
Digital citizenship education	Expert Group on Digital Citizenship Education – European Schoolnet	Belgium, Finland, France, Hungary, Ireland, Latvia, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Serbia, Türkiye
Online safety	Expert Group on Safer Internet for Children – European Commission	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
	Internet Governance Forum – United Nations	Countries: Czech Republic, Denmark, Estonia, Finland, Greece, Iceland, Netherlands, Sweden Intergovernmental organisations: African Union, Council of Europe, European Commission
	ITU Council Working Group on Child Online Protection	Azerbaijan and Italy are vice-chairs
Digital education	Expert group for Digital Education Content – European Commission	Austria, Bulgaria, Croatia, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Slovakia, Spain, Sweden
	Working Group on Digital Education: Learning, Teaching and Assessment – European Commission	Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Türkiye, Ukraine

Topic	Initiative	Participants from Council of Europe member states
Digital skills	Digital Public Goods Alliance	Germany and Norway are governance board members
Media literacy	Expert Group on Media Literacy – European Commission	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden
	Expert Group on Governance Responses to Mis- and Disinformation – OECD	Members of the steering group: Belgium, Finland, France, Greece, Lithuania, Luxembourg, Norway
	European Digital Media Observatory	Adria Digital Media Observatory (ADMO): Croatia, Slovenia Baltic Engagement Centre for Combating Information Disorders (BECID): Estonia, Lithuania, Latvia Belgium-Netherlands Digital Media and Disinformation Observatory (BENEDMO): Belgium, Netherlands Bulgarian-Romanian Observatory of Digital Media (BROD): Bulgaria, Romania Central European Digital Media Observatory (CEDMO): Czech Republic, France, Poland, Slovakia (<i>de facto</i>) European Digital Media Observatory Belux (EDMO BELUX): Belgium, Luxembourg EDMO Ireland German-Austrian Digital Media Observatory (GADMO): Austria, Germany Hungarian Digital Media Observatory (HDMO): Hungary Italian Digital Media Observatory (IDMO): Italy Mediterranean Digital Media Observatory (MEDMO): Cyprus, Greece, Malta NORdic Observatory for Digital Media and Information Disorder (NORDIS): Denmark, Finland, Norway, Sweden Iberian Digital Media Observatory (IBERIFIER): Portugal, Spain
Citizenship education	Eastern European Network for Citizenship Education	Armenia, Azerbaijan, Georgia, Moldova and Ukraine
	Networking European Citizenship Education platform	Austria, Germany
Education	Global Education Network Europe	Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden
	Working Group on Schools – European Commission	Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Türkiye

In addition to expert groups, the study findings have identified several projects within the framework of international co-operation aimed at upholding DCE principles. For example, Italy, Latvia and Türkiye are involved in the Erasmus+ funded project Digital Citizenship Movement in School that aims to raise awareness of families and children by using the digital transformation pioneers of Erasmus+ on the way to become a good digital citizen, defined as a critical citizen who can use the benefits of information and communication (European Commission 2023). In addition, within the scope of the Erasmus+ programme, projects such as DALI4US, which includes Ireland, Luxembourg and Slovenia, recognise data literacy as essential for digital citizenship education (DALI4US n.d.).

The European Commission project eTwinning involves the 27 European Union member states and facilitates collaborative projects among teachers and students from Erasmus+ participating countries via the TwinSpace environment. National support organisations validate user registrations, ensure platform safety, provide support, and award national and European quality labels for innovative projects showcased in the annual eTwinning book.

In relation to the topic of online safety, Global Kids Online (n.d.) is an international research project that aims to generate and sustain a rigorous cross-national evidence base around children's use of the internet by creating a global network of researchers and experts. Albania, Bulgaria, Montenegro and Serbia are among the member countries. Additionally, Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and Türkiye are participating in the Building Trust in Media in South East Europe and Turkey project (UNESCO 2022b), funded by the European Union and UNESCO. The initiative aims to enhance youth critical thinking through media and information literacy, enhance media capacity to counter misinformation and strengthen media accountability via sustainable self-regulation.

Additional frameworks for international co-operation have been identified, encompassing conferences, workshops and training sessions. For example, in 2020, the Slovak Ministry of the Interior, together with the European Council for Digital Good and the NGO digiQ organised the conference Digital Citizenship through the Eyes of the Youth to strengthen the youth voice for a healthier, smarter and safer internet (Slovakia 2020). Sweden, with the support of the European Schoolnet and the European Association for the Education of Adults, hosted the conference Empowering Digital Citizenship Through Media Literacy and Critical Thinking (European Schoolnet 2019). The workshop Challenges for Citizenship Education in Azerbaijan took place in Baku in 2021, in collaboration with the Eastern European Network for Citizenship Education and educators from Germany and Azerbaijan. The workshop highlighted the importance of applying the concept of digital citizenship in Azerbaijan.

Additional information on implementation

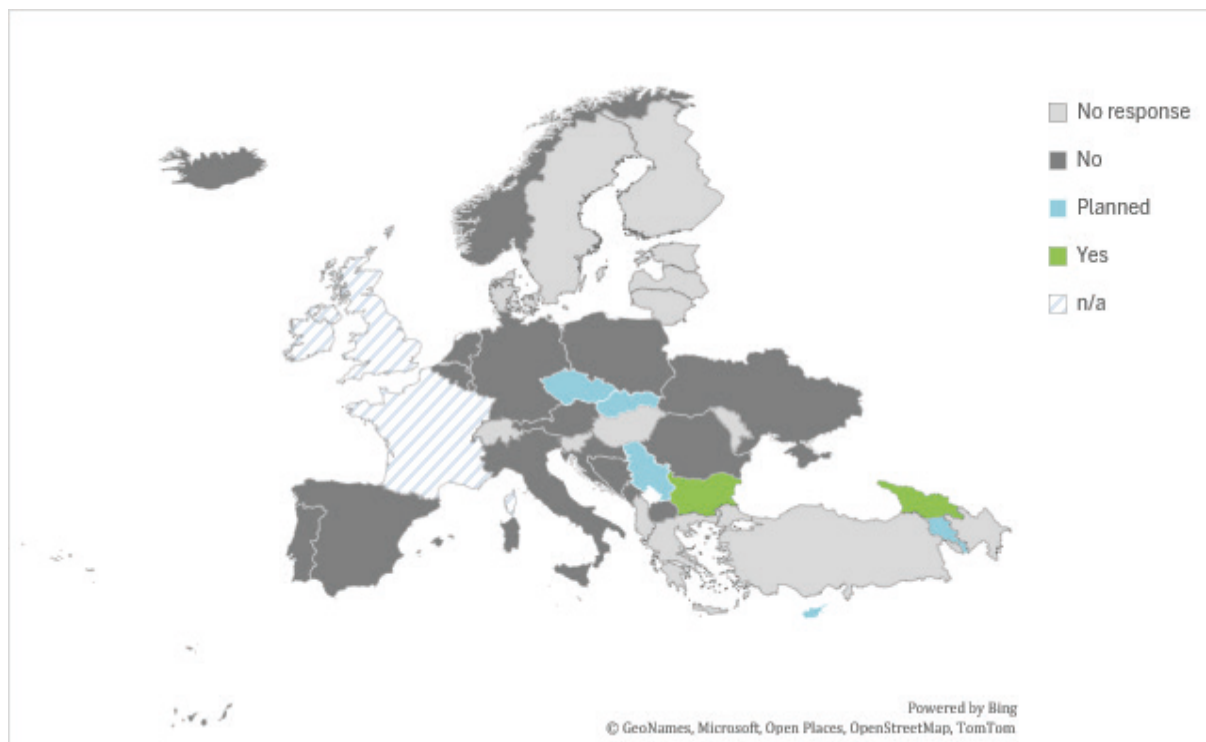
Additional provisions of the DCE Recommendation, namely the translation of the Recommendation and the training of teachers and education professionals on DCE, were not in the initial scope of the present study and not covered in the desk research, but some information was collected through the survey with national authorities.

Translation of the DCE Recommendation

Currently, the DCE Recommendation is available on the Council of Europe website in English and French. Following a request of the Council of Europe, the online survey for this study included the question: "Did the government or any relevant stakeholder translate the DCE Recommendation of the Council of Europe and disseminate it among competent authorities and stakeholders, and if so, how was it communicated?" The responses were grouped into five categories: countries that have translated the DCE Recommendation, those planning to translate, those that have not translated it, those that did not respond to the online survey and those where translation was not applicable, because their national language is English or French.

The results show that, while a few countries have translated the DCE Recommendation and others have expressed plans to do so, the majority have yet to take action or did not respond to the survey, which leaves the translation status uncertain.

Figure 3. Translation of the DCE Recommendation across countries



As can be observed in Figure 3, 19 countries reported that they had not translated the DCE Recommendation: Andorra, Austria, Belgium, Bosnia and Herzegovina, Croatia, Germany, Iceland, Italy, Luxembourg, Malta, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Spain and Ukraine. This highlights a significant gap in ensuring that the DCE Recommendation is accessible in the national languages of these member states.

On the other hand, only two countries – Bulgaria and Georgia – confirmed that they had translated the DCE Recommendation. In Bulgaria, the Ministry of Education and Science completed the translation in 2019 and disseminated it among a wide range of education stakeholders. Similarly, in Georgia, the National Centre for Teacher Professional Development translated the DCE Recommendation into Georgian and published it in online format in September 2024.

In addition, five countries – Armenia, Cyprus, the Czech Republic, Serbia and Slovakia – indicated that they plan to translate the DCE Recommendation in the near future. In Armenia, national authorities reported that the translation of the DCE Recommendations has already begun. In Cyprus, national authorities indicated their plan to complete the translation by the end of 2024. The Czech Republic has scheduled its translation for 2025. In Serbia, authorities are waiting for the final version of the Digital Citizenship Core Curriculum before proceeding with the translation. Similarly, the Slovak Republic plans to complete the translation as part of its activities for the European Year of Digital Citizenship Education in 2025.

Finally, 16 countries did not respond to the online survey and/or the question on the translation of the DCE Recommendation. For the four remaining countries, translating the Recommendation was deemed unnecessary, as their national languages were already covered by the Council of Europe’s existing translations. These countries are France and Monaco (French) along with Ireland and the United Kingdom (English).

Training of teachers and education professionals

There are several cases of teacher training initiatives among member states, but these are not yet fully prevalent.

Some member states have formally adopted DCE principles into formal teacher training. In Austria, DCE-related topics are embedded in both initial teacher training programmes for secondary education and continuing professional development courses for teachers of all levels. A government-funded, massive, open, online course on DCE provides flexible learning opportunities for educators (Austria 2022). In Cyprus, DCE training for teachers

is actively facilitated by the government as part of broader initiatives to promote digital literacy and competence.⁸ Finland incorporates digital literacy into its new national core curriculum, ensuring that teachers are equipped to address DCE principles within various subject areas.⁹

Other countries have begun offering specific optional training initiatives, mostly leveraging existing structures. In Luxembourg, the Institut de Formation de l'Éducation Nationale offers teacher training programmes that address digital citizenship, equipping educators with the skills and knowledge to integrate digital technologies effectively into their teaching practices (Luxembourg n.d.). Ireland stands out with its Digital Citizenship Champions Programme, developed by OIDE, Technology in Education and Webwise. This initiative empowers primary school teachers to effectively teach digital citizenship, reflecting a commitment to equipping educators at the foundational level (OIDE n.d.). Portugal promotes DCE domains through teacher training sessions organised by the SeguraNet Awareness Centre, collaborating with the Training Centres of School Associations. This approach leverages existing professional development structures to disseminate DCE principles.¹⁰ Romania integrates DCE training into the broader professional development framework for teachers, ensuring alignment with the objectives of the national education system.¹¹

In other member states, this is still work in progress. Many countries are actively developing and refining their teacher training programmes for DCE. Andorra plans to launch a new digital competences training programme for teachers in 2025, which will include DCE aspects. Iceland anticipates incorporating key DCE actions stemming from its participation in the European Year of DCE 2025 into the second action plan of its Education Policy 2030. Italy is actively planning a comprehensive strategy for the European Year of DCE 2025 that will include awareness initiatives, training programmes and interactive activities for educators and training hubs.¹²

8. Online survey of national authorities.

9. Online survey of national authorities.

10. Online survey of national authorities.

11. Online survey of national authorities.

12. Online survey of national authorities.

Chapter 5

Conclusions and recommendations

European and international frameworks relevant for DCE

Several European (Council of Europe, European Union) institutions or international organisations (OECD, UNICEF, UNESCO) have developed frameworks, policies and guidelines to promote principles related to DCE. The topics most frequently covered in such frameworks include digital skills, digital education frameworks, online safety, media literacy and digital inclusion. These documents, while generally not binding, play a significant role in shaping the national policies and practices of the Council of Europe member states.

Integration of DCE into national policies, legislation and curriculums

According to this study's findings, only five member states (Belgium, France, Iceland, Malta and the Republic of Moldova) make explicit reference to the DCE Recommendation or DCE principles of the Council of Europe in policy documents or curriculums. Some member states refer to other initiatives of the Council of Europe in strategic documents, such as the recommendation on basic competences for lifelong learning, the recommendation on the rights of the child in the digital environment and the Charter on Education for Democratic Citizenship and Human Rights Education. Building on these examples, additional member states should integrate the DCE Recommendation into their national policies, legislation and curriculums.

Despite not referring directly to the DCE Recommendation of the Council of Europe, other relevant national strategies and policy documents have been identified in this study that convey some of the principles of the DCE Recommendation. Most of these strategies focus on digital education, digital skills, media literacy, online safety, digital citizenship, or more broadly digitalisation in general. Member states should introduce more directly the principles of the DCE Recommendation into their national policies and curriculums and make reference to the DCE framework of the Council of Europe whenever applicable. Member states could also link or gather the different actions fostering DCE under a common policy or legislation.

The policy initiatives identified with relevance for DCE are implemented through a variety of instruments. The policy instruments used are mostly national strategies, action plans, road maps, national agendas or programmes, under the responsibility of one or more ministries. These strategies are implemented through legislation, revisions of the learning frameworks, funding programmes and soft-law measures.

Actions to promote the DCE Recommendation and related initiatives

Awareness-raising approaches to promote DCE principles can be directly related to the national strategies and policies on DCE and related principles, supporting their implementation at various levels, or they can have a broader scope, conducted by authorities in collaboration with diverse stakeholders across different contexts. The study has shown that countries engage in awareness-raising strategies through formal, non-formal and informal approaches. These actions include learning frameworks, online resources, conferences and presentation acts, guidelines, training programmes, targeted projects and campaigns, reports and publications, and the creation of child-friendly resources. While formal education integrates DCE principles into curriculums, non-formal initiatives like workshops and campaigns, and informal initiatives like social-media campaigns and gamified content, complement these efforts by focusing on lifelong learning and informal engagement. This review has shown that awareness activities target a wide array of stakeholders from students and teachers to parents, civil society organisations and policy makers, ensuring a holistic approach.

This review has identified two sense-making practices in collaboration with the Council of Europe in Slovenia and Türkiye that increase the impact and reach of DCE principles aligning with international standards. In addition, it is worth mentioning that Safer Internet Centres play a pivotal role, acting as focal points for the different initiatives in European countries and enhancing awareness through centralised platforms. Thus, member states could increase efforts to actively participate in these centralised platforms, engaging diverse audiences and offering a unique opportunity to use the internet and learn about its dangers.

In addition, member states could choose to adopt different awareness strategies in non-formal and informal contexts. This would involve diversifying communication channels to ensure a broader reach, inclusivity and engagement across various audiences. This approach would enable a deeper, more meaningful understanding of DCE in diverse community and educational contexts. In this regard, the review has identified that countries use innovative methods to communicate DCE principles, such as a variety of media formats including videos, gamified learning and interactive platforms. Furthermore, it is essential that resources remain accessible to all, particularly for different age groups. For instance, child-friendly resources help fill gaps in understanding and facilitate the practical application of DCE principles.

Frameworks for assessing the impacts of the DCE Recommendation

The national strategies, programmes and action plans identified in the areas of digital transformation, digital education and digital skills usually include provisions on their implementation, monitoring and evaluation. In terms of frequency, most of the strategies include a final evaluation, but many also propose intermediary monitoring and evaluation exercises, with regular progress reports. Member states that do not already have provisions for the monitoring and evaluation of their national policies related to DCE should introduce them, specifying their approach and frequency.

In most countries the strategies are monitored directly by the ministries in charge, sometimes with specific steering committees involving different ministries or stakeholders, or with independent experts. Depending on the administrative structure, some of the strategies are implemented and monitored at a local level. In terms of the assessment methods, member states often define key performance indicators on the objectives and actions to be monitored, which are informed by internal administrative data, external indices and indicators or by survey and feedback data collected from stakeholders. Some of the self-evaluations identified relate to the European Union DigComp framework, while several countries also refer to international indices and performance assessment programmes (e.g. DESI, PISA, TALIS, PIAAC, ICILS, ICCS). The results of the national monitoring and evaluation are published in reports or presented in monitoring dashboards or observatories in some countries, although only a limited number of evaluation reports are publicly available. While the process of evaluating national strategies and policies depends on national structures, it would be beneficial to use comparable indicators to measure progress of DCE across member states and to make final evaluation reports of national initiatives publicly available, to enable stakeholders to assess the state of play of DCE progress.

Stakeholder involvement in design, implementation and evaluation

In the vast majority of member states, relevant stakeholders are actively involved in designing DCE-related legislation and policies, demonstrating a recognition that successful implementation requires a collaborative approach. This involvement takes various forms, including public consultations, working groups with representatives from diverse sectors, and feedback mechanisms for educators, parents and students.

While stakeholder engagement in the design phase is positive, there is a lack of evidence on specific mechanisms to ensure equitable representation and meaningful participation from diverse stakeholders. To enhance the effectiveness of stakeholder involvement in the design of DCE-related policies, member states could consider developing guidelines and frameworks for stakeholder engagement that ensure representation from a wide range of groups, as well as resources and support to empower stakeholders to contribute meaningfully to the design process. Documenting and communicating the outcomes of stakeholder consultations transparently is also key.

Similar to the design phase, there is a general trend towards strong stakeholder involvement in implementing DCE-related legislation and policies. Some countries establish multisectoral councils to oversee the implementation of national digital-skills strategies. However, implementation mechanisms vary significantly across countries. Member states could use regular communication channels and feedback mechanisms to facilitate ongoing collaboration among stakeholders. Another area for growth is involving more teacher training institutions in actively engaging in implementation, rather than passively adopting guidelines. Member states should encourage teacher training institutions to put the country policies on DCE into practice, for example by recognising or acknowledging certificates or diplomas of teacher training activities.

There is little evidence of consistent, meaningful stakeholder involvement in the evaluation of DCE-related initiatives. While many member states have evaluation processes, the specific mechanisms for engaging stakeholders in shaping these evaluations often remain unclear. To ensure that evaluations effectively inform policy improvements, more member states could focus on establishing transparent mechanisms for feedback and input from stakeholders on evaluation findings.

Engaging stakeholders in evaluation design can bring valuable perspectives and insights, leading to more comprehensive and relevant evaluation frameworks. For example, teachers can provide feedback on the practicality and effectiveness of assessment tools, while parents can offer insights into the impact of DCE-related initiatives on their children's learning and behaviour. Including diverse stakeholders in the monitoring process can help ensure that evaluations consider the needs and experiences of different groups, leading to more equitable, inclusive and impactful outcomes.

Frameworks for co-operation between public, private, civil and education sectors

National frameworks specifically for DCE are rarely directly linked to the recommendations. Many member states are integrating collaborative elements within their wider digital strategies. The trend across multiple countries is to acknowledge that effective DCE implementation requires a multistakeholder approach that brings together government ministries, schools, NGOs, academia and private companies. Various types of partnerships are used to support DCE-related principles. Public-private partnerships are becoming more frequent, where governments provide funding and support to organisations working in areas related to DCE. In addition, many countries have established strong connections with Safer Internet Centres, which play an essential role in advancing online safety, media literacy and other core aspects of digital citizenship. These partnerships between governments, private companies and Safer Internet Centres demonstrate a commitment to leveraging existing structures and expertise to promote DCE goals. However, there is little evidence as to the formal structures and operational mechanisms of these co-operative frameworks. Whether these frameworks are formally established with clearly defined roles and responsibilities, or are more ad hoc arrangements centred around specific initiatives, remains unclear.

Evidence on the alignment of co-operation frameworks with standards for equitable quality education is limited. Some sources indicate alignment with broader national or international policies and frameworks that encompass quality education principles. Several initiatives and partnerships target specific groups to promote digital inclusion and address potential disparities in access to quality DCE. That said, an overall lack of detail means more research is needed to assess the extent to which existing frameworks promote inclusion and address the needs of diverse learners.

Member states' participation in frameworks for international co-operation

This study has shown that international collaboration is essential for the development of DCE. It distinguishes between international co-operation frameworks with the Council of Europe and other frameworks beyond this. Regarding the former, the DCE Promoters' Network provides a centralised platform for sharing information and good practices, which allows countries to learn from each other, strengthening DCE initiatives. In addition, the planned activities for the European Year of DCE 2025 will encourage more active participation and provide a valuable opportunity to observe the most successful practices and scale them across different contexts. Furthermore, the alignment of DCE activities with other educational frameworks, like the Reference Framework of Competences for Democratic Culture, ensures that DCE efforts are not isolated but part of broader objectives. Member states could seek to establish closer co-operation with the Council of Europe in their DCE initiatives. The European Year of DCE 2025 presents a valuable occasion to enhance collaboration and further advance DCE efforts across Europe.

Other international co-operation frameworks include the establishment of active expert groups and networks, ongoing projects of international co-operation and other collaborative platforms such as conferences, workshops and training sessions. Countries engage in these activities in co-operation with international and supranational organisations, such as the European Commission, the United Nations, UNESCO, the OECD, the Global Education Network and the ITU, among others. Closer co-operation with these international frameworks, prioritising the exchange of knowledge and good practices, could be enhanced.

Translation of the DCE Recommendation

The results of the online survey revealed that, while a few countries have translated the DCE Recommendation and others have expressed plans to do so, the majority have not translated the DCE Recommendation or did not respond to the survey. Specifically, only two countries – Bulgaria and Georgia – have translated the DCE Recommendation, in 2019 and 2024 respectively. In addition, five countries – Armenia, Cyprus, the Czech Republic, Serbia and Slovakia – indicated plans to translate it in the near future. On the other hand, 19 countries reported that they had not translated the DCE Recommendation, 16 countries did not respond to the survey and/

or the question regarding translation, and four countries considered translation unnecessary, as their national languages were already covered by the existing French and English translations provided by the Council of Europe. Member states should therefore consider increasing efforts to translate the DCE Recommendation into their national languages to ensure broader accessibility and understanding.

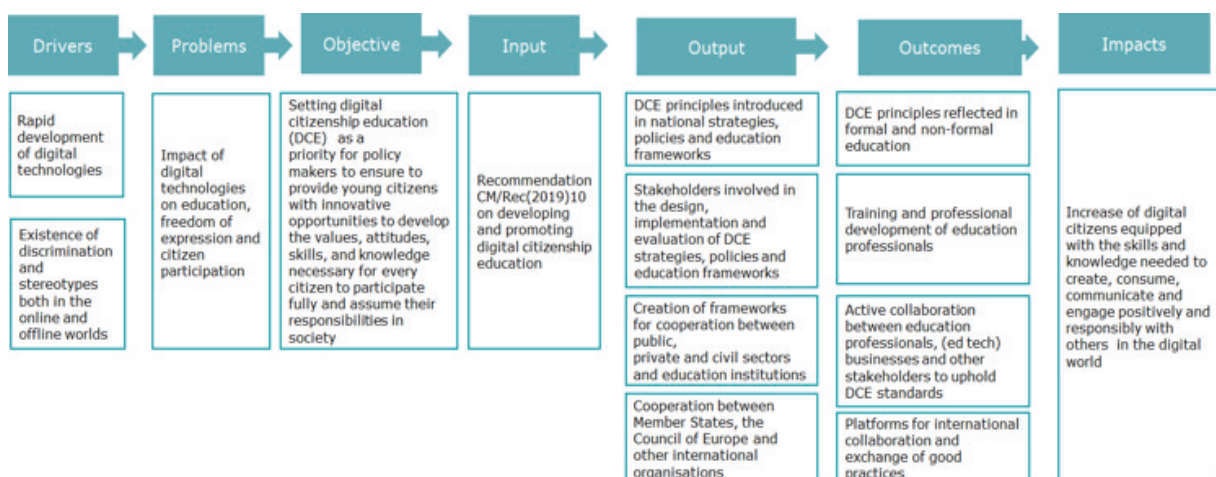
Training of teachers

Progress in integrating DCE into teacher training varies across member states. Some countries demonstrate effective models by embedding DCE into formal programmes and professional development. However, many countries are still developing strategies, with some planning DCE-focused initiatives for 2025. To accelerate progress, member states should leverage existing training structures to ensure educators are equipped to address digital challenges and teach digital citizenship education in schools.

Appendices

Appendix 1

Intervention logic of Recommendation CM/Rec(2019)10



Appendix 2

Analytical framework

Review questions	Judgment criteria	Indicators	Data sources
a. Review member states' legislation, policies, including learning frameworks (curricula for school education, study programmes for higher education), to ensure that they are aligned with the recommendations, principles and further guidance set out in the appendix to this Recommendation; promote their implementation in formal, non-formal and informal education settings; and assess the impact of the legislation, policies at regular intervals			
Appendix 1: Have the member states reviewed their legislation, policies and learning frameworks to ensure that they are aligned with the recommendations, principles and guidance?	1.1 The DCE Recommendation has been mentioned in policy documents and strategies	Policy documents mentioning the DCE Recommendation	Desk research Survey with member states Survey with DCE Promoters' Network
	1.2 The principles of the DCE Recommendation have been embedded in existing legislation or policies	Legislation or policies and learning frameworks integrating the DCE Recommendation principles	Desk research Survey with member states Survey with DCE Promoters' Network
	1.3 The DCE Recommendation was the basis of a new national strategy/policy document	New strategy or policy document integrating the DCE Recommendation Funding allocated to new DCE policies	Desk research Survey with member states Survey with DCE Promoters' Network
Appendix 2: Have the member states promoted the implementation of the DCE Recommendation in formal, non-formal and informal education settings?	2.1 The DCE Recommendation has been disseminated to relevant stakeholders	Number and types of stakeholders receiving information on the DCE Recommendation	Desk research Survey with member states Survey with DCE Promoters' Network
	2.2 The principles of the DCE Recommendation and related policies have been promoted in awareness-raising activities	Number and types of awareness-raising activities	Desk research Survey with member states Survey with DCE Promoters' Network
Appendix 3: Have the member states assessed the impact of the legislation and policies implementing the DCE Recommendation at regular intervals?	3.1 The member states have defined an approach to assess the implementation and impact of the DCE Recommendation	Approaches to assess the DCE policies, education programmes and learning outcomes Assessment level (school, local, regional, national)	Desk research Survey with member states Survey with DCE Promoters' Network
	3.2 The member states have conducted regular assessments of the impacts of the DCE Recommendation	Number of assessment reports	Desk research Survey with member states Survey with DCE Promoters' Network

Review questions	Judgment criteria	Indicators	Data sources
b. Involve all relevant stakeholders in the design, implementation and evaluation of digital citizenship education legislation, policies, including through the provision of appropriate resources and training			
Appendix 4: Have the relevant stakeholders been involved in the design of DCE legislation and policies?	4.1 The relevant stakeholders were consulted before the design of the DCE legislation and policies	Number and types of consultation activities targeting relevant stakeholders Number and types of stakeholders consulted	Desk research Survey with member states Survey with DCE Promoters' Network
	4.2 The relevant stakeholders participated in the design of the DCE legislation and policies	Design process for the DCE legislation and policies Number and types of stakeholders involved	Desk research Survey with member states Survey with DCE Promoters' Network
Appendix 5: Have the relevant stakeholders been involved in the implementation of DCE legislation and policies?	5.1 The relevant stakeholders have been informed of the implementation of DCE legislation and policies	Types of communication activities towards stakeholders Number and types of stakeholders targeted by communication activities Number of training activities conducted Number of stakeholders participating in training activities	Desk research Survey with member states Survey with DCE Promoters' Network
	5.2 The relevant stakeholders have been involved in the implementation of DCE legislation and policies	Number and types of implementation channels Number and types of stakeholders involved	Desk research Survey with member states Survey with DCE Promoters' Network
Appendix 6: Have the relevant stakeholders been involved in the evaluation design of DCE legislation and policies?	6.1 The relevant stakeholders have been involved in the evaluation of DCE legislation and policies	Evaluation approach and measures Number and types of stakeholders involved	Desk research Survey with member states Survey with DCE Promoters' Network
c. Support the creation of frameworks for co-operation between public, private and civil sectors and education institutions, and ensure that they align with relevant national, European and international standards and uphold the right of citizens to equitable quality education			
Appendix 7: Have the member states supported the creation of frameworks for co-operation between public, private and civil society actors and education institutions?	7.1 The member states have supported the creation of co-operation frameworks between stakeholders	Actions of member states to support co-operation frameworks Types of co-operation frameworks established	Desk research Survey with member states Survey with DCE Promoters' Network
	7.2 The frameworks for co-operation involve public, private and civil society actors	Types of stakeholders involved in the co-operation frameworks Types of activities under these co-operation frameworks	Desk research Survey with member states Survey with DCE Promoters' Network

Review questions	Judgment criteria	Indicators	Data sources
Appendix 8: Have the member states ensured that the co-operation frameworks between stakeholders align with standards for equitable quality education?	8.1 The co-operation frameworks established align with standards and uphold the right of citizens to equitable quality education	References to existing frameworks, standards or labels related to equitable quality education	Desk research Survey with member states Survey with Promoters' Network
d. Pursue and encourage co-operation between the Council of Europe and other international organisations in designing and implementing strategies, policies, programmes, research and other projects on digital citizenship education and on the use of digital technologies in education and share on an ongoing basis good practices, pedagogical innovations and educational resources			
Appendix 9: Have the member states been involved in co-operation between the Council of Europe and international organisations in designing and implementing strategies, policies, programmes and research on DCE?	9.1 The member states have encouraged co-operation between the Council of Europe and other international organisations in designing and implementing policies and projects on DCE	Co-operation frameworks between the member states, the Council of Europe and other international organisations on DCE Level of participation of member states in these co-operation frameworks	Desk research Survey with member states
	9.2 The member states have contributed to sharing good practices, pedagogical innovations and education resources to the Council of Europe and other international organisations	Channels for sharing good practices, pedagogical innovations and education resources on DCE Types of joint activities conducted Types of resources shared	Desk research Survey with member states

Source: Authors' own work.

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This report sheds light on how states across Europe are implementing the recommendation, highlighting practical approaches to embedding digital citizenship education across schools, communities and beyond. It reveals the progress made, the gaps that remain and the ways in which governments, educators and stakeholders are working together to foster digital literacy, inclusion and participation.

Designed for policy makers, educators and anyone involved in shaping digital learning, this review offers valuable insights and recommendations to help build a more inclusive, safe and democratic digital future for all.

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