DIGITAL CITIZENSHIP EDUCATION

WORKING CONFERENCE

"Empowering digital citizens"

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DIGITAL CITIZENSHIP EDUCATION

WORKING CONFERENCE

Paul Gerhard

General Rapporteur

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Education Policy Division
Education Department
Council of Europe

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Acronyms

CDC: Competences for a Democratic Culture

CDPPE: Steering Committee for Educational Policy and Practice

CoE: Council of Europe

DC: Digital Citizenship

DCE: Digital Citizenship Education

DCEP: Digital Citizenship Education Project

GAFAN: Google, Apple, Facebook, Amazon and Netflix

IPC: Information and Privacy Commission

MOOCs: Massive Open Online Courses

Introduction

The Council of Europe (CoE) hosted the *"Digital Citizenship Education: Empowering Digital Citizens"* conference in Strasbourg, France, on 21 and 22 September 2017. The conference was held within the framework of a two-year pan-European project led by the CoE and entitled the *"Digital Citizenship Education Project* (DCEP)". The DCEP was approved by the Steering Committee for Education Policy and Practice (CDPPE) at its 2015 plenary meeting (Discussion Note DGII/EDU/CDPPE (2015) 6).

The event brought together 55 participants from more than 30 different national, pan-European and international organisations, including the CoE, the European Commission, ministries of education, national agencies, academia and the digital industry.

The conference provided an opportunity to bring together a wide range of stakeholders and to contribute to the development of a policy framework for Digital Citizenship Education (DCE). This is closely linked to the CoE's Model of Competences for Democratic Culture (CDC) which aims to prepare citizens to live together as equals in culturally diverse democratic societies.

The DCEP aims to utilise the CDC model and adapt it to the needs of DCE, in the hope that it will impact on national curricula.

The objective of the Conference was to take stock of the work done by the DCEP over 2016-2017 and to facilitate discussion between various education and digital stakeholders on key questions raised by DCE. This discussion should then result in the establishment of a roadmap for the next stage of the project and inform the work of the DCE Expert Group set up by the CoE specifically for the DCEP.

1. Conference format and background information

1.1. Conference documentation

The following documents were circulated to conference participants before and during the event. They formed the background documentation for the discussions, representing the output of project activities in 2016-2017 from the DCE Expert Group (only the main documentation is mentioned here):

- *Conference Discussion Paper* (EC/DCE (2017) 03 – Gave the background and rationale for the DCEP and provided the foundation for the Conference discussions.
- *Digital Citizenship Education, Volume 1, Overview and New Perspectives* (provisional version). Also referred to as the *Literature Review* – Examined the academic and policy literature on the concept of Digital Citizenship (DC) since 2000.
- *Digital Citizenship Education, Volume 2, Multi-Stakeholder Consultation Report* (provisional version) – Featured an analysis of policy issues and good practice regarding DCE.

1.2. Conference sessions, panels and working group discussions

The event took place over a one-and-half day period and consisted of three plenary sessions, a panel discussion and three multi-stakeholder working group conversations.

Plenary Session 1

Chaired by Villano QIRIAZI, Head of Education Policy Division at the CoE.

Matthew JOHNSON, Director of Democratic Citizenship and Participation at the CoE, opened the Conference by introducing the need for DCE while framing the main issues facing youth today.

"Setting the Scene" session:

- Martin BARRETT, Emeritus Professor of Psychology, University of Surrey, introduced the work of the CoE in the area of the CDC.
- Brian O'NEIL, Researcher at the Dublin Institute of Technology, gave the key conclusions of the *Literature Review*.
- Elisabeth MILOVIDOV, Lawyer and Consultant for the CoE, introduced the participants to the *Multi-Stakeholder Consultation Report*.

"Working groups' themes introduction" - Introduction to the concept of DCE

Three working group discussions were introduced by three moderators. The working groups consisted of the following themes:

- Working Group 1: Roles and responsibility for education actors – Rapporteur, Pascale RAULIN-SERRIER, Moderator, Brian O'NEIL.
- Working Group 2: Future challenges of DC – Rapporteur, Alessandro SORIANI, Moderator, Martin SCHMALZRIED.
- Working Group 3: Preparing teachers for DCE – Rapporteur, Vitor TOME, Moderator, Janice RICHARDSON.

Participants in the working groups were given a set of guidelines to facilitate discussions. These included: key questions raised; priorities to move forward with DCE; current gaps in DC in society and how they can be filled; and implications for the education sector with regard to each working group's theme.

Plenary session 2

Sjur BERGAN, Head of Education Department at the CoE, chaired the second Plenary Session and presented two country examples where programmes to teach digital competences in schools have led to transformative change. The session featured:

- Sherry LIANG, Assistant Commissioner, Information and Privacy Commission (IPC), Ontario, Canada
- Andres ÄÄREMAA, Ministry of Education and Research, Estonia

Plenary session 3

"Youth Panel"

On the second day of the Conference, four youth experts, aged 12 to 19 years old, shared their perceptions of DC as well as their experiences of life online. Having young people take the floor at the CoE provided a unique opportunity to hear the unfiltered voice of those who will benefit from DCE.

"Beyond the boundaries: sharing responsibility and governance of DCE" - Multi-Stakeholder Panel

The Conference concluded with a panel discussion with four experts from schools, academia and the digital industry. The panel was moderated by James DYSON, founder of Dyson Communications, and featured a list of questions to stimulate a discussion around the theme of governance in DCE.

Panel participants included:

- Jacqueline BEAUCHERE, Chief Online Safety Officer, Microsoft Corporation
- Divina FRAU-MEIGS, Sorbonne Nouvelle, UNESCO Chair "Savoir Devenir"
- Ger GRAUS, Global Director of Education and Partnerships, KidZania
- Jackie MARSH, Professor of Education, University of Sheffield
- Anna Karidi PIROUNAKI, Kindergarten Teacher focused on e-Safety

This Report presents the themes highlighted by the experts at the Conference, organised around the five main questions which were under discussion:

- What is DCE?
- Why is there a need for DCE?
- Who should be involved in DCE?
- How should DCE be taught?
- When should DCE be taught?

2. What is Digital Citizenship Education?

2.1. Definitions

A critical aspect of the DCEP is to define what DCE means. A working definition was therefore outlined and distributed to participants prior to the conference[1]. This definition stems from the work of the DCE Expert Group, who studied a wide body of academic and policy literature published since 2000. This work aims to build a consensus on what DCE means and to support a framework for DCE[2].

This working definition consists of three parts as outlined by Brian O'Neil, researcher at the Dublin Institute of Technology, member of the DCE Expert Group and co-author of the *Literature Review.*

- **Digital engagement**: Affords active participation and confident use of technology in the digital realm.
- **Digital responsibility**: Pertains to the values and attitudes necessary to engage in said active participation.
- **Digital participation**: Expands the notion of DC given that new technology enables digital participation beyond the boundaries of the state.

While the review of the literature shows there is no single definition of DC, the working definition of the DCEP demonstrates the consensus that DC requires a set of transversal competences to succeed in the digital world. The CoE's CDC "Butterfly" was the starting point of the DCEP as it lists these transversal citizenship competences into four groups: values, attitudes, skills, and knowledge and critical understanding[3].

There is still persistent confusion between online safety (which aims to protect against the risks of the digital world) and DCE (which is the set of values and attitudes to have online). Consequently, a comprehensive definition is needed. An 11-year-old summed up the difference by explaining that "DC is the code on how to act and internet safety is the troubleshooting". Ian Power of the National Youth Council in Ireland and Executive Director of SpunOut, explained the difference in similar terms, when he was interviewed during the Conference on the CoE social media feed[4]. In other words, digital literacy is the knowledge of how to use new technologies whilst DCE can be described as the moral codes, values and ways in which people should use these tools to behave online in a respectful, democratic and responsible way.

An agreed definition, along with the DCEP's upcoming *Handbook on Digital Citizenship*, will allow governments, civil society, industry and academia to start with a common base.

Recommendations from the DCE Expert Group

Agreeing on a definition for DCE for all actors involved was the first of seven recommendations from the *Multi-Stakeholder Consultation Report*[5].

2.2. Citizenship and digital citizenship

Young experts invited to the Conference made clear how the skills and attitudes described in the CDC model were key to understanding DC, especially given the increasingly blurred boundaries between the digital and the real world. They highlighted how responsible citizens navigate the world with a set of values and beliefs which help them solve adverse situations.

[1] Conference Discussion Paper EC/DCE (2017/07), p10

[2] FRAU-MEIGS; Divina, O'NEILL; Brian; SORIANI, Alessandro; TOME, Vitor; Digital Citizenship Education, Volume 1, Overview and new perspectives, p13

[3] Council of Europe, retrieved from wwww.coe.int/competences on 28.09.2017

[4] Retrieved on 10.10.2017 from https://t.co/TCfSJ3jJJ8

[5] RICHARDSON; Janice, MILOVIDOV; Elizabeth, Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, p43

A young expert explained how, for him, values are the most important of the four CDC competences to be a citizen, and by extension a digital citizen. He stated “in the real life, there is the threat of consequences for your actions while online you have to rely on yourself to make the right decisions… values and beliefs are interconnected and crucial if we want to coexist in the society”.

Another young expert explained that “DC is not much different to citizenship; simply everything is so much faster on the web… with the press of a button you can share, buy, inform yourself in seconds”. DC is thus an extension of citizenship.

The relationship between online and offline in connection with DC was also discussed during *Working Group 2*[6]. Participants in the working group highlighted that key competences at the core of democracy, such as debating, are best expressed offline due to the importance of face-to-face communication in this regard. Online activities in schools can even be used to demonstrate the limitation of online activities in such areas.

Given that online content is constantly changing, to allow for the effective teaching of responsible behaviour online, DCE should focus on the core fundamentals of democratic citizenship and values.

[6] Detailed outcome of the three working groups are available in the appendix

3. Why is there a need for Digital Citizenship Education?

3.1. Risks and opportunities

Opening the conference, Mr Matthew JOHNSON, Council of Europe Director of Democratic Citizenship and Participation, explained how young people are "born in a world in which the opportunities presented by the digital revolution are taken for granted". However, young people may also take for granted the risks and challenges which come with these opportunities.

Digital Citizenship Education is a new field in education and seeks the empowerment of children to make informed choices when faced with the potential afforded by new technologies. Being a digital native does not necessarily mean being digitally literate and there is the risk of creating a growing gap between those who develop the competence to reap the benefit of their use of new technologies and avoid its pitfalls, and those who drop out and fall victim to Cyberbullying, trolling, phishing etc… and more recently online radicalisation.

The Council of Europe has been working on the issue for a number of reasons which were under discussion at the conference: the need to promote democratic culture in Europe, the dangers of big data and its use by government or industry and the restriction of our autonomy as a result of, among other things, our increasing reliance on digital technology.

3.2. Need for democratic culture

The CoE's CDC model is the culmination of 25 years work promoting democratic culture. A democracy is not a democracy without its citizens holding democratic views which then inform the institutions, laws and constitutions they live by. Additionally, in order to function, democratic culture requires intercultural dialogue. Regardless of your affiliation in society (ethnic, religious or cultural), you should be able to participate in the democratic process.

The CDC model, as a competence-based approach for students and formal education systems, should be used to strengthen these competences so that students are encouraged to participate as active citizens in democratic society.

A visual model for DCE, with the CDC at its foundation, was proposed in the Conference Discussion Paper[7]. Five pillars are built on the foundation of the CDC: policies; actors; strategies; infrastructure; resources and evaluation. These pillars then support 10 DC domains derived from the Literature Review. The visual model shows the links that exist between the CDC and the DCE domains where these competences should be applied.

The *Multi-Stakeholder Consultation Report*[8] presented the findings of two surveys sent to 200 organisations and experts from the 47 member-states of the CoE, to study best practice in DCE. The survey specifically referred to the 10 digital domains of DCE and the 20 competences of the CoE's CDC. The eventual aim is to develop a framework concept of DCE, with an adaptation of the CDC descriptors, to respond to the specific needs of DCE.

It was made clear that this work should continue and Elizabeth MILOVIDOV, co-author of the Report, called on participants to contribute to further identifying how DCE is defined and applied in national or regional contexts.

3.3. Empowerment of Individuals and of the community

One key aspect discussed was the issue of individual responsibility in the face of the perceived anonymity afforded by new technologies. DCE aims to develop responsible attitudes for young people's lives online, given that consequences in the digital world are perceived to be less severe than in the real world.

[7] Conference Discussion Paper (EC/DCE (2017) 03, p11; also, appendix 8.1 CDC "Butterfly" and DCE Visual model

[8] Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, p49

In the words of a young expert at the conference, “in real life you can’t hack your way through, when you rob a DVD in a store, you get much more frightened than when you rob a movie on the internet”.

Empowering young people to make the right choices online can be achieved if children become actors in their education, as opposed to simple recipients.

An example of this empowerment was provided by Andres ÄÄREMAA, from the Ministry of Education and Research in Estonia, when he highlighted the high level of subsidiarity afforded to schools in Estonia. In some schools, students are able to become teachers and offer classes in a subject they have mastered, such as coding.

The community also needs to be empowered, which notably includes parents. During the *Multi-Stakeholder Panel*, Jacqueline BEAUCHERE, Chief Online Safety Officer, Microsoft Corporation, highlighted the need to build confidence in all adults, which is currently lacking across the board. The empowerment of the whole ecosystem is a key implication of DCE for the education sector, as it is the community who is responsible for the use and misuse of digital environments.

It is the responsibility of decision-makers and governments to pass a positive message about the potential offered by new technology and to motivate young people, parents, teachers and the community at large, to actively and responsibly participate in society.

3.4. Consumers and actors

A young expert expressed that one of the dangers in modern society is that users are turned into consumers. This was not always the case, however it is becoming a bigger danger as more and more digital products are geared towards entertainment rather than encouraging a creative and active societal role. This can lead to new forms of discrimination that narrow our choice and guide or dictate future online activities. This includes accessing public services such as health, welfare and education, as was explained in the *Opening Session*.

This is further complicated by the fact that online communities have redefined what it means to be a digital citizen on their platforms, with varying degrees of active participation, as was mentioned during *Working Group 2*. There is a difference between being a digital citizen on Facebook or Google and being a digital citizen on Wikipedia, or on the decentralised web where more participation is expected.

3.5. Blockers and helpers

As Ger GRAUS, Global Director of Education and Partnerships, KidZania, explained at the *Multi-Stakeholder Panel,* there is a danger of making assumptions when asked about the weakest link in our efforts to promote DCE. We may have assumptions about access (to digital technologies), participation and/or motivation. For instance, when evaluating or surveying schools we should not make any assumptions based on location and access to technology.

The question “what is blocking the take-up of DCE and of digital literacy education?” was also raised. For Divina FRAU-MEGS, co-author of *Overview and Perspectives*, politicians and the media still have a “pre-digital mindset”. Both have a monopoly they feel is threatened when the masses are empowered to navigate the online realm responsibly. Politicians are not used to promoting participatory democracy, as advocated by DC, or sharing the monopoly they have on the strategy and organisation of society. Meanwhile, as FRAU-MEGS makes clear, the media have constructed themselves as the “spokespersons, the sociologist, and the historian… we [therefore] have to address these two filters as a priority”.

Addressing this pre-digital mindset is a human rights issue. To circumvent the blockers, Ger GRAUS challenged the audience to spread a more positive message about DCE. It is an exciting development in the education sector but “we talk about it as if it was a disease, while new technologies are a huge opportunity”. This positive message should be conveyed to politicians and the media to explain that media literacy and DCE are not an end to their monopoly, but a “disruption”, which Ms FRAU-MEGS maintains, can be positive.

Teachers and parents should lay out the positive routes for young people to become digital citizens. As explained in *Working Group 2*, online spaces should be considered for young people as a place where they can experiment with their identity and develop their concept of democracy. The message should be less about fear and danger and more about opportunity.

4. Who should be involved?

4.1. Multi-stakeholder approach

The CoE, as a pan-European intergovernmental organisation, has a formal education focus when it comes to education projects, which includes DCE. However, it has adopted a multi-stakeholder approach to address the issue of DCE, engaging and researching what should be the roles and responsibility of all educational actors in this domain. Conference participants and Working groups agreed that DCE should not be the sole responsibility of teachers or the education system.

One of the priorities mentioned during *Working Group 1,* was the need to develop a holistic and persistent approach to bring all stakeholders together, without leaving any behind. The roles and responsibilities of education actors are part of an ecosystem. Therefore, formal and informal learning spaces, private and state-funded teaching institutions, and/or actors, all have a part to play in DCE.

Young experts at the *Youth Panel* also highlighted the necessity of seeing education in a broader sense, encompassing young people's experiences in and outside the classroom. "Education happening in class is important, especially for pupils from difficult families, but it's also happening at home... we should not build a wall between what is happening in class and outside of the classroom… education is a continuous space". Another young expert expressed a more sceptical view: "[DC] is up to education, but not up to schools… parents, students, peers, role models on the internet… there is a lot of informal learning which happens outside of school".

Two examples highlighted ways to engage the wider community. Sherry LIANG, Assistant Commissioner, Tribunal Services - Information and Privacy Commissioner of Ontario, presented the information and resource programmes for teachers developed by the IPC in the area of digital literacy. Their resources are mainly aimed at educators, but the IPC is exploring the use of webinars which will enable engagement with a wider range of stakeholders.

Webinars were also identified by *Working Group 3* as a way of sharing practice and engaging teachers with other stakeholders, such as researchers. Webinars would also create a forum for educators, industry partners and other relevant stakeholders, to collaborate on the development of DCE.

4.2. Identified actors, roles and responsibilities

During the conference, the following discussions pertained to the following actors:

Children / pupils / students

Ger GRAUS explained at the *Multi-Stakeholder Panel* that the involvement of children is key to providing the "why" answer, or in other words, to understanding the purpose of DCE. Adults regularly underestimate what children can do and how inventive they can be. "Children learn on the go, involve themselves across ages… we should observe and make it better". One example was given where children in the KidZania[9] bank were able to transfer KidZania money to their friends, after which it took the work of four adults to put it right.

The involvement of children in all aspects of the teaching process was highlighted as crucial by Anna Karidi PIROUNAKI, Kindergarten Teacher focused on e-Safety, "…because working with computers and being on the internet is part of their life". In the same discussion, a similar message was put forward by Jacqueline BEAUCHERE, when describing the Microsoft initiative "Council for Digital Good", which is composed of teens reflecting on DC issues.

One of the recommendations of *Working Group 1* was to recognise that children's freedom of expression might enhance peer-to-peer learning and blend together the roles of student and teacher.

Parents

[9] KidZania is a chain of Theme Parks where children, through role play, can work in adult jobs, experiment, collaborate as in real life and earn currency. There are 24 locations across the world.

Research has shown that parental engagement in their child's digital life is a reflection of anxiety and fear rather than confidence. Empowering parents is therefore equally as important as empowering teachers. One of the priorities for DCE is therefore to provide specific guidance to assist parents and teachers in creating a more positive partnership.

Digital parenting was also highlighted as a priority given that parents acting as the digital guardian will frequently seek advice from teachers or other education stakeholders.

Recommendations from the DCE Expert Group

Reaching out to parents and getting them to engage in the DC debate is the third of seven recommendations from the *Multi-Stakeholder Consultation Report* [10].

Industry (public/private relations)

The relationship between industry and other stakeholders should be built around a framework of trust in order to enable them to work together and openly discuss the issue of DCE as equals.

Young experts expressed scepticism about industry involvement given the belief that industry places financial profit over user benefit. They used the example of Terms and Conditions having to be accepted before using apps. A young expert explained that it could take up to 75 days just to read all of the Terms and Conditions on the services used by one person. Companies should make it easier and more accessible for younger people to know what apps can do and how your private data might be used.

Anna Karidi PIROUNAKI explained that companies and governments should work together to co-share and co-create the resources needed for the education system, as currently industry occupies the gap left by governments. This risk was also identified by Divina FRAU-MEGS: "GAFAN (Google, Apple, Facebook, Amazon and Netflix) have a monopoly. We want a public debate and consultation on the future of the internet with all the stakeholders worldwide, on the same footing. This is not the case at the moment. At the moment, the corporate world is taking the lead, which is paradoxical".

The need for an equal footing, as well as doubts about its feasibility, was also one of the conclusions of *Working Group 1.* Companies could be more involved in DC as key enablers and key players, all the while taking into account that working with GAFAN would also have multiple implications. To allow schools and industry to operate on an equal and transparent footing, appropriate legislation needs to be drafted.

Schools

Given their central role, from the perspective of the CoE, schools are the best place to prepare young minds, help them make the best use of technology and to participate meaningfully in society, both online and offline. Programmes on DCE should, however, also consider the balance between formal education in schools and informal education involving other stakeholders.

Recommendations from the DCE Expert group

Mapping the administrative and legal responsibilities for school leaders, teachers, students and parents is the second of seven recommendations from the *Multi-Stakeholder Consultation Report* [11].

Unions

Representatives of both student and teacher unions were present at the Conference, with a view to gaining a better understanding of their role in the area of DCE. Trade unions have a responsibility to foster social dialogue and professional development. Indeed, Janice RICHARDSON, co-author of the

[10] RICHARDSON; Janice, MILOVIDOV; Elizabeth, Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, p43

[11] Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, pp43

Multi-Stakeholder Consultation Report, confirmed that unions were involved in the work of the DCEP through contacts in Croatia. As such their specific needs should, and are, being taken into account.

Teachers and school leaders

Teachers should gain the confidence and motivation to act as role models for their pupils. A comment from *Working Group 2* was that teachers necessarily need to act as both nerds and philosophers: philosophers to understand the underlying importance of the concept of DC in modern forms of democratic participation, both online and offline; and nerds, because innovations in the digital transformation happen so fast.

To enable teachers to effectively straddle the challenge between technical competence and understanding the need for DC as a key to democracy, one solution is to grant them more autonomy. This was identified as one of the gaps in DCE in society during *Working Group 3*.

Another key gap identified was teacher qualification, resources and support. Teachers need to gain digital skills in both initial and in-service training. One of the recommendations from *Working Group 3* was that teacher education should be less top-down. Rather it should focus on pedagogy, emphasising pupil-to-pupil and teacher-pupil interactions, and utilise the competence and skills described in the CDC framework.

School leaders will face huge challenges from the digital environment and will thus require training so that they can take the lead on DCE learning. *Working Group 1* made it clear that it will be down to decision makers to embrace the importance of DCE and free the required budgets to ensure a sustainable effort is made.

Researchers

Jackie MARSH, Professor of Education at the University of Sheffield, explained that the relations between government and researchers need to improve, given the evidence that “we have excellent research that never becomes policy”. An increased effort is thus needed for both sides to enter into a constructive dialogue so that they might share critical reflections on different research models and develop co-produced research.

The knowledge base also needs to be enriched in the area of DCE. We need to be able to trace a child’s digital footprint from birth. This should range from early engagement in creativity and production to the first time they encounter cyberbullying, and beyond.

However, accessing and harnessing such data for research purposes may be difficult in light of the stringent privacy laws protecting minors. As Divina FRAU-MEGS explained, there is a need to develop tools that protect children's privacy while giving researchers the necessary data required to facilitate valid and replicable results.

Research into DCE also has to broaden its scope and involve experts from various fields, such as artificial intelligence, neuroscience, pedagogy, philosophy and social policy.

Decision makers / governance

There was clear consensus that policy-makers need to realise the importance of DCE. Ger GRAUS explained that If we conclude DCE is of paramount importance, governments should allocate the same resources to DCE that are allocated to other subjects like mathematics and science. “Fund it, commit to it, train teachers and educators and measure it properly,” concluded *Working group 2*. This is all the more crucial as few students or teachers know what DCE is, despite the clear pressing need to develop the skills and attitudes required to navigate the online world safely and responsibly.

Indeed, guidelines for policy makers should be created to explain why DCE is important, and not let the corporate world take the lead, as is currently the case. At the same time, DCE has to compete with other subjects in an already crowded curriculum. It is the responsibility of governments to frame DCE as a cross-curricular subject and thus as a lens through which other subjects should be seen. This will require strong political will and governance, which is currently lacking.

As previously mentioned, there is also a clear need for policy-makers to engage with all other stakeholders, be it civil society, industry or academia, to define the field of DCE.

Other frameworks

Riina VUORIKARI, from the European Commission, suggested taking into account the Digital Competence Framework (DigComp) developed by the European Commission's Joint Research Centre[12]. Synergies with UNESCO's Global Media and Information Literacy Framework were similarly mentioned. To demonstrate how DigComp can be utilised, Andres ÄÄREMAA, from the Ministry of Education in Estonia, highlighted his Ministry's assessment model for digital competence, which will be tested in 2018 on students aged 9 and 12, and which has been based on the DigComp Framework.

It was the objective of the *Literature Review*[13] to find these synergies and to examine various international frameworks (including DigComp and UNESCO's Literacy Framework). At the session on *"Setting the Scene",* experts predicted that there will be more of an alignment between frameworks in the future.

[12] European Commission, Joint Research Centre, retrieved from https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework on 28.09.2017

[13] Digital Citizenship Education, Volume 1, Overview and new perspectives, p.16-17

5. How to teach Digital Citizenship Education?

5.1. Curriculum

DCE intersects with subjects across the curriculum and therefore cannot be considered in isolation. Ensuring digital skills are taught in a cross-curricular manner was thus identified as a priority area by *Working Group 1,* as was the need to add digital competence frameworks to national curriculum standards. The curriculum, moreover, has to be flexible and dynamic in order to adapt to the constant changes in society and technology.

Working Group 3 advocated for broader learning outcomes so that DC competence can be embedded in different subjects. Teachers, trade unions, students, researchers, NGOs and other stakeholders who have direct experience in the classroom should be involved in designing flexible curricula which are able to accommodate DCE. Teachers should also be given the necessary autonomy to adapt to the moving target of "the digital transformation".

In Ontario, the balance between the demands of the curriculum, the quality of outcomes and the flexibility afforded to teaching methods, is carefully crafted. Sherry LIANG from the IPC, highlighted that such a balance should include a combination of prescriptive standards, whilst still offering the freedom to utilise a variety of study and assessment methods.

5.2. Teaching methods

There were several teaching methods identified which could aid the roll out of DCE. These included increasing child involvement in the teaching process and also giving children more time and freedom to experiment and play, particularly when they are younger. Anna Karidi PIROUNAKI explained that we must be sure to engage in meaningful activities when involving children, in a way which connects to their real-life experience. She gave an example and explained "it does not make sense to use Skype to talk to your neighbour, but rather use the tool to connect with a friend in Portugal who is doing a project with your class".

Involving children might alleviate some of the negative aspects described by Director Matthew JOHNSON during the *Opening Session*. These include a reduced sense of belonging perceived by young people who are confronted with "behaviours that promote the individual on the one hand, and society on the other and how this is magnified in the digital world." This perception was echoed by a young expert on the *Youth Panel* who argued that "15-year-olds feel excluded and feel they aren't important… they should be talked to as adults".

5.3. Resources to teach DCE

A key aspect under discussion was the need for quality, validated resources to teach DCE. These resources may already exist and should be made available to educational institutions and practitioners.

Peer-to-peer networks and communities of practice can play a crucial role in identifying these resources. Anna Karidi PIROUNAKI made it clear during the *Multi-Stakeholder Panel* that teachers need support to critically identify resources. This help is necessary to enable teachers to efficiently narrow down the sheer amount of resources available to them and find the most appropriate materials for teaching DCE. Resources can furthermore be implemented to fit different kinds of contexts (for example multicultural/multilingual contexts), as identified during *Working Group 2*.

A key advantage of DCE is that examples and scenarios are discernibly concrete for young people. Divina FRAU-MEIGS underlined that DCE is experienced-based and that pedagogy should thus be built on young people's experience of the online and offline world. These tools should encourage users of digital technologies to play an active and creative role online, rather than simply being passive consumers.

5.4. New resources, Existing resources, repurposing

At the *Multi-Stakeholder Panel,* Divina FRAU-MEIGS explained that we should have a "Wikipedia mindset in terms of resources… resources should be available, repurposed, modified by the community… for this we need to build trust". According to *Working Group 2* the focus should thus be on repurposing, rehashing and remixing the excellent resources that already exist.

Resources should also be built in an iterative fashion and constantly adapted to the changing environment. This was the position of Sherry LIANG during the *Plenary Session 2* when she gave examples of resources that were created as a complete ready-made package, aligned with the curriculum, and able to be used directly in schools. These resources on digital literacy and privacy were created in cooperation with teachers. One resource, aimed at encouraging young people to think twice before posting, showed the five 'P's', with each 'P' representing those who can see online posts (predators, parents, police, professors (teachers) and prospective employers).

5.5. Evaluation of resources / Quality assurance

A key issue raised when discussing resources was resource evaluation and quality assurance. Andres ÄÄREMAA of the Ministry of Education and Research in Estonia, explained that this was a critical point in education policy. In Estonia, teacher peer reviews, pedagogical board reviews and usage statistics are utilised to evaluate the quality of resources. Copyright was another issue raised by Mr ÄÄREMAA, given that some material for resources might be hidden due to copyright laws. Similar to creative commons licences, a labelling could be put in place to identify a resource's quality and fitness for purpose. The design of this labelling scheme could be led by the CoE.

Recommendations from the DCE Expert group

> Creating a compendium of the best resources to create lessons plans and learning opportunities, based on the work of the surveys is the fifth of seven recommendations from the *Multi-Stakeholder Consultation Report*[14].

5.6. Government-led programmes

Another key challenge concerns evaluation and assessment of programme outcomes. Researchers must play a role in designing new models which will utilise the appropriate indicators to evaluate transformative change.

Measuring behavioural change is a particular challenge, as Jacqueline BEAUCHERE made clear when answering the question "how do you measure effectiveness and impact of projects?". Indeed, Microsoft uses strategies such as activity analysis which may be used as proxies for the behavioural change they are trying to observe. However, Ms BEAUCHERE maintains that in general, "it has eluded us and many in the industry".

Recommendations from the DCE Expert group

> Solid monitoring to monitor emerging trends in the online sphere is the sixth of seven recommendations from the *Multi-Stakeholder Consultation Report* [15].

[14]Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, pp44

[15]Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, pp44

6. When to teach Digital Citizenship Education?

6.1. Early childhood education

A consensus from the Panels and Working Groups centred on the need to start teaching DCE at a young age by focussing on the early childhood sector. One reason for this is that children are online at a young age and may therefore experience early encounters with harmful content or behaviour online, such as fake news. Access to pre-school DCE should therefore be a priority. A young expert explained that "teachers have a role to play in digital citizenship education and help the children to understand… they should try to explain it at a younger age".

Another reason highlighted at the *Youth Panel* is that adolescent children are less inclined to listen to adults than children under the age of 10. "Teaching citizenship to people who have their opinion settled is more difficult than those who are trying to form their understanding of how the world works," a young expert explained.

6.2. Early childhood research

Starting to teach DCE at a younger age should be coupled with research targeting younger audiences. One of the issues in this regard, is that young people often do not know how to talk about their experiences online, or do not understand key concepts about the internet. This is an area where research and education can shed light.

From kindergarten age, DCE should be investigated using pedagogically appropriate play-based approaches. Jackie MARSH explained that work in this area should start by helping children understand the similarities and differences between online and offline relationships. She undertook a research study in a primary school on the relationship between online and offline play and the development of friendships. One of her findings was that children who did not engage extensively in online activities were not excluded from offline activities in the playground, but that children may be excluded from online play groups if they demonstrate unsociable behaviour in the playground.[16] Therefore, young children need to develop the skills and understanding to enable them to navigate both online and offline social relationships effectively, so that they can build empathy and trust across both domains.

Understanding how young people experience the complex interactions between the online and offline worlds, as well as the continuum between these two spheres, is crucial. Indeed, it will require more effort from the research community to build the knowledge base which is currently lacking. The dearth of literature in early childhood DCE was one of the issues identified in the *Literature Review,* which stated that only three projects have so far targeted children younger than 10 years old.

Additionally, as mentioned previously, the "when to teach" should also consider "where to teach". Indeed, informal education outside the classroom is as central as the formal education system to instil the values, attitudes, skills, knowledge and critical understanding to become responsible citizens online and offline.

Recommendations from the DCE Expert group

> Research on the developmental windows for the teaching and inculcation of values, attitudes, skills, knowledge and critical understanding and how timing is a key factor in triggering and developing DC competences is the seventh recommendation from the *Multi-Stakeholder Consultation Report*[17].

[16] Marsh, J.A. (2014) *The relationship between online and offline play: friendship and exclusion*. In: Burn, A., (ed.) Children's Games in the New Media Age: Childlore, Media and the Playground. Ashgate, pp. 109-132

[17] Digital Citizenship Education, Volume 2, Multi-stakeholder consultation report, pp44

7. Conclusions

The conference "*Digital Citizenship Education Working Conference: Empowering Digital Citizens"* highlighted the need to extend the CoE's work on the CDC to the digital world. With new technologies pervasive in all aspects of our lives, what makes a responsible citizen offline (participating and contributing to the democratic process) should be extended to our lives online.

Education and schools are in a unique position to help youth make the best use of technology and to equip them with the values, attitudes, skills, knowledge and critical understanding necessary to make a meaningful participation in society, both online and offline.

DCE is a new domain of policy. As the *Overview and New Perspectives* and *Multi-Stakeholder Consultations* have shown, there is still a wealth of policies, programmes and definitions behind the term. It is the role of the CoE and of the DCEP to build consensus around a definition of DCE and bring the topic to the forefront of the educational policy debate.

This will not be an easy task. Policy makers, schools, teachers, parents and researchers have a pre-digital mindset which needs to be overcome. Young people may be digital natives, but digital literacy and understanding the need for responsible behaviour when using technology, needs to be learned. On the other hand, when it comes to technology use, industry is finding itself increasingly filling the gap left void by governments.

Priorities

- School culture and teaching methods need to change, with schools having to rapidly adapt to accommodate DCE in the curriculum and move towards the post-digital mindset.
- Policy-makers need to realise the importance of DCE. Guidelines for policy makers should be created to explain why DCE is important.
- The education sector cannot act alone and so a multi-stakeholder and integrated policy approach is necessary. A large coalition for DC is thus needed and must include all stakeholders, such as schools, families, civil society, industry, researchers. The scope of these efforts should also be widened to reflect the diversity of culture and language within and between CoE member states.
- Resources need to be identified, developed, packaged and delivered to educators, while still ensuring quality and ease of use. Quality criteria and peer review must also be put in place.
- Programmes on DCE should consider the balance between formal education in schools and informal education with other stakeholders. For example, peer learning with parents and classmates also facilitates the learning of responsible online behaviour. Schools should provide structure to this learning, for example through forms of debate, which will enable learners to experience and understand democracy and moral codes.
- Agreeing on a definition for DCE will allow governments, civil society, industry and academia to start with a common base. This definition should highlight the cross-curricular character of DCE.
- Greater autonomy in teaching DCE will allow teachers to adapt more readily to the innovation of the online realm. More autonomy will require a flexible curriculum which is able to adapt to the changes in society.
- Teacher training in DCE during both in-service and initial training will give teachers more confidence to become a role model for their students and to be both 'philosophers' and 'nerds'. This confidence building should also be extended to parents, guardians, carers and medical professionals.
- Early childhood education should be targeted in DCE policies given that research has shown that children use technology very early in life. Teaching responsible behaviour online should therefore start at an equally early age. Behavioural research should also start at an early age to inform policy making.

- ► Evaluation of programmes should be supported by quality, co-produced research to ensure measures undertaken are supported by validated quality data. The knowledge base in the area of DCE needs to increase both in terms of quantity and quality (for example age of pupils, languages, geographical scope and cultural contexts covered).
- ► Researchers and policy makers need to engage in critical reflection and constructive dialogue, with researchers open to different research models and policy makers open to policy ideas suggested from research products.

Recommendations and action items

- ► Similar to creative common licences, a label, for easy resource identification and certification for teachers, could be developed by the CoE as a solution to support the creation of resources for DCE.
- ► Massive Open Online Courses (MOOCs) and online/offline resources are needed to teach the responsible use of new technology. The CoE should lead the way in creating valuable resources in the area of DCE, aimed at various stakeholders. The use of social MOOCs as a platform where these stakeholders can share best practice and interact would be an added benefit for the DCE ecosystem.
- ► A handbook and guidelines for policy makers is scheduled to be produced by the end of the year. These will be a useful instrument in facilitating understanding of the importance of DCE within CoE member states.
- ► Identified priorities at the Conference listed in the present *General and Working Group Reports*, should form the basis of the continued work of the Expert Working Group towards a framework for DCE.

A policy framework for DCE and a strategy for the CoE's member states need to be put in place. A set of descriptors for DCE should be a key deliverable when adapting the CDC to DCE.

DCE competes for attention in the curriculum with a wealth of subjects which may take priority because they fulfil certain economic needs. It is the responsibility of the CoE to raise the issue of DCE as a key to developing the informed and responsible citizens of tomorrow, both online and offline.

Demonstrating its relevance and developing a flexible framework of competences, which can adapt to the challenge of the digital transformation, is thus the key challenge for the DCEP.

8. Appendices

8.1. CDC "Butterfly" and DCE Visual Model

Figure 1 – Conceptual model of digital citizenship

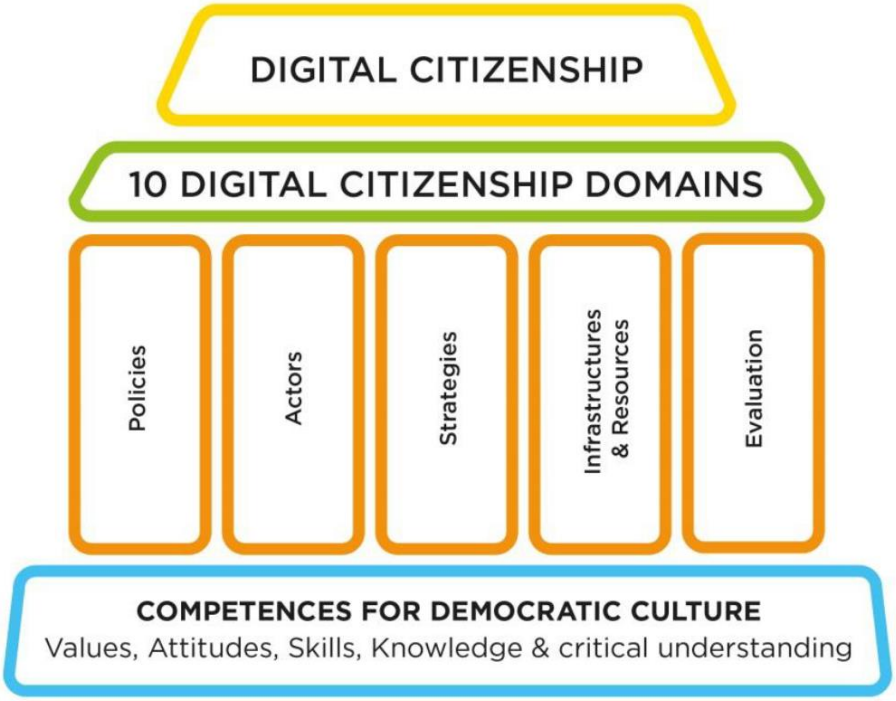
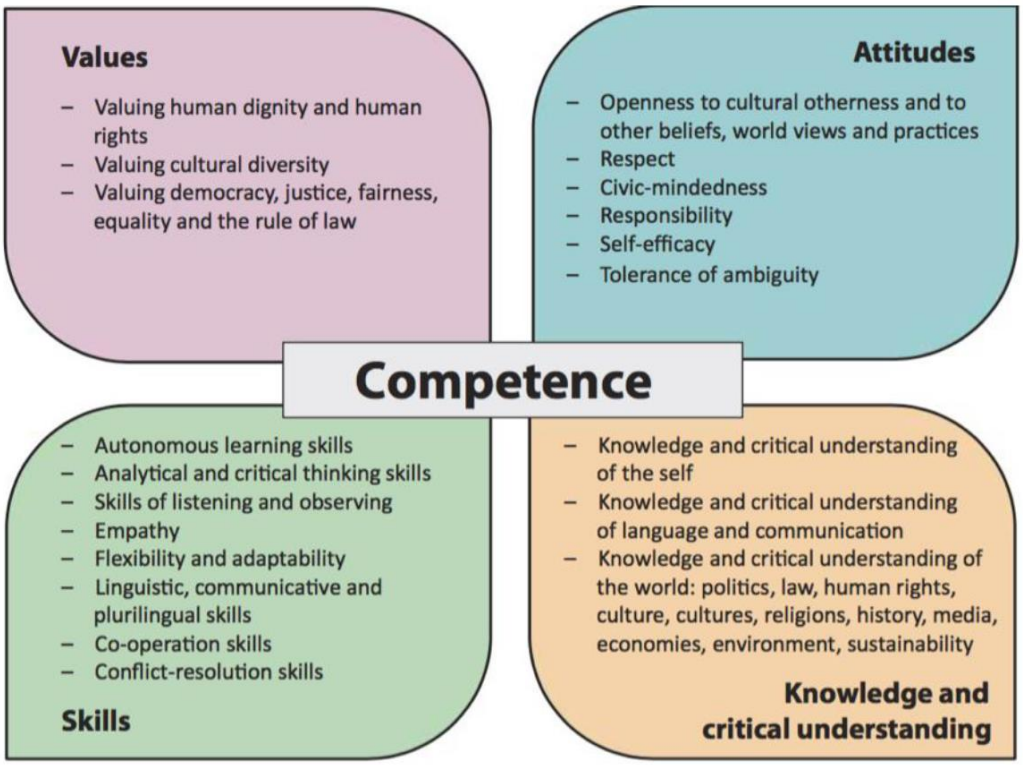


Figure 3 – The 20 competences for digital citizenship



8.2. Working Group 1 - Roles and responsibility for education actors

Rapporteur: Pascale RAULIN-SERRIER

Moderator: Brian O'NEIL

Objectives of the Working Group

The Working Group was composed of a panel of representatives from a wide variety of Ministries of Education and a number of other stakeholders from safer internet offices and the digital industry.

The Group sought new scenarios for school organisation and to consider the preparation of all actors for their new roles and responsibilities in DCE. This will serve as the basis for an implementation strategy.

Key questions raised during the Session

The objective of bringing DCE into schools, as an entry point for learning DC, requires the development of transversal skills:

- ► There is a need to redefine the respective roles of parents and teachers with regards to DCE, due to current overlapping
- ► If parents require a special focus and to develop different DCE skills accordingly, teachers roles in the classroom will be altered and they must be trained to deal with more assertive and informed parents
- ► Recognising children's freedom of expression might enhance peer-to-peer learning and will see the roles of student and teachers blended together
- ► School leaders will face huge challenges from the digital environment
- ► Working with GAFAM~~N~~ will have a lot of implications (a device policy should be developed), however companies could be more involved in DC, acting as both a key player and enabler of DCE

What are the move forward rapidly with digital citizenship?

1. **Developing specific guidance** to assist parents and teachers in fostering a more positive partnering relationship
2. **Finding a new approach to teaching** to bring forth fresh ways of thinking that will enable teachers to be actively involved in DCE and to navigate the current technological gap which exists between teachers and students
3. **Facilitating and teaching digital parenting skills** given that parents acting as digital guardians are more regularly seeking advice
4. **Defining school responsibilities** when coping with the evolving digital landscape and facilitating school utilisation of smart devices in education
5. **Teaching digital skills in a cross-curricular manner** and adding a digital competence framework to national standards
6. **Focus on the assessment of transversal skills** to highlight student learning outcomes
7. **Develop a holistic and persistent approach** to bring together all stakeholders whilst leaving no-one behind (Go fast, go alone, go further, go together!)

What are the current gaps in digital citizenship in society and how can it be filled?

- ► **Lack of teachers' qualifications** to teach DC is currently one of the largest gaps in DCE service delivery. It is vital that teachers gain digital skills in both in-service and initial training.
- ► **Assessments** must also be further developed to enable the effective measurement of student learning outcomes when new DCE curricula go live.

- **Restriction and filtering** policies in schools are different between countries, it could be essential to have frameworks and coherent policy models to help school address the increasing number of student's personal devices and the necessary control schools need over the use of their network and resources. Digital citizenship policies have a role to play in tackling and answering these issues because there is a need for digital citizenship instruction to effectively find out the right balance between restricting and promoting openness and access.

What are the implications for the education sector? With respect to roles and responsibilities, future challenges, or preparing teachers.

- Regarding the range of solutions and priority options outlined for the education sector, it will be the responsibility of decision makers to ensure the required budgets are available to enable effective and sustainable policy implementation.
- Research must pay special attention to providing different age-groups with tailor-made content(s) and appropriate methodologies accordingly.

8.3. Working group 2 - Future challenges of Digital Citizenship

Rapporteur: Alessandro SORIANI

Moderator: Martin SCHMALZRIED

Objectives of the Working Group:

- Work around the meaning of DC, which mainly centres on two components: 1) digital (infrastructure, skills, competences and literacy) and 2) citizenship (challenges, membership, values, responsibilities, empowerment and civic education)
- Address whether we consider the issue of DC without considering the offline world
- Identify the main challenges around the concepts of agency and empowerment
- Discuss the terms and meaning of democracy (focusing on democratic culture)

Key questions raised during the Session

- How can we strike a balance between online and offline in teaching DC skills: are the skills for deliberating better acquired offline rather than online?
- In what ways do youngsters differently experience poverty and inequality in the school and home space (linked to the role of families) and how does this affect inclusive DC?
- What is the role of schools and of non-formal education in DC?
- How do we promote agency, engagement, empowerment and responsibility so that children can become actors in their own education?
- How do you effectively engage institutions and facilitate commitment to DC work?
- What is the role of the private sector in the debate and what tensions arise between consumer awareness and online citizenship?

What are the priorities to move forward rapidly with digital citizenship?

- **Non-formal education:** Children learn outside the classroom from an early age and also from their offline experiences. Non-formal education is thus as important as formal education with regards to DC, and we must therefore treat the issue in a similarly complex way by using different methodologies accordingly.
- **Role of institutions:** If DC is truly important then all institution must fund it, commit to it, train teachers and educators for it, and measure it properly.
- **Role of experts:** We should involve experts from other fields such as artificial intelligence, neuroscience, pedagogy, philosophy and policy.
- **Role of NGOs:** Due to their grassroots approach, NGOs can address issues more rapidly and fill the gaps left by institutions. NGO involvement is thus crucial - however it must occur in coordination with the relevant institutions.
- **Balance between online and offline:** Deliberation competences which are at the core of democracy are best exercised offline. Indeed, it is interesting and insightful to use offline domains to show the limitations of online domains (highlighting, for example, how online debate is less effective than offline debate due to the loss of face-to-face communication).
- **Digital citizenship integrated into everyday school life**: Learning by doing enables learners to experience democracy. For example, utilising role play and board games, enables children to experiment and understand the key aspects of DC in a safe and controlled environment. Indeed, rather than being taught, children need to be driven to come up with their own conclusions. This also applies to parents and those in teacher training.
- **Tools:** Combining both open source tools and private tools (for example, both Windows and Linux, both Facebook and Diaspora) will enable learners to compare their experiences of both, the philosophy behind it, and how these experiences change on one platform/tool to another.

What are the current gaps in digital citizenship in society and how can it be filled?

- **Context:** It is important to identify ways to fill the gap between what happens in schools and what happens outside the classroom. NGOs and non-formal education can be utilised in coordination with schools and institutions to fill this gap more rapidly and effectively
- **Discrepancy between online and offline worlds**
    - An extremist platform online might not be reflective of the offline lives of citizens residing in a democratic country. Similarly, an online democratic platform does not represent the offline lives of citizens living in an extremist/authoritarian country.
    - There is also regularly a discrepancy between the theory of citizenship and digital citizenship and the reality of the offline world. For example, children may learn about DC in a context where no democracy is at work, corruption occurs at the highest levels of government, there is a biased mass media (not just fake news), and private actors heavily influence policy.
- **Industry:** Online communities have redefined what it means to be a digital citizen on their platforms. Being a digital citizen on Google or Facebook, is different from being a digital citizen on Wikipedia or on the decentralised web. We need to consider the differences between these and whether certain players in the industry are facilitating more or less participation, creativity, and democratic respect for others.
- **Building on the current skills and knowledge base:** It is important to acknowledge the good things that are already happening, both inside and outside schools, which may help to strengthen DCE in the future. For example, schools and teachers who use eTwinning and BIK to exchange information and knowledge, are empowering themselves to become experts in their own field. Such efforts can be utilised when considering the implementation of DCE.

What are the implications for the education sector? With respect to roles and responsibilities, future challenges, or preparing teachers.

- **Nerds and philosophers:** Teachers have to be both ‘nerds' and ‘philosophers'. This could be a collaborative and shared effort, where children are valorised as digital ‘nerds' and teachers act as the digital ‘philosophers’, or indeed, the other way-round.
- **Individual Responsibility:** Given that there is much less enforcement online, individuals can get away with more than they would in real life. It is therefore much easier to stand by and allow illegal activities to occur online. The community as a whole is directly responsible for the online environment and must combat the ‘reflex’ of leaving illegal activities for the law enforcement or public authorities to address.
- **Space for experimenting:** Online spaces should be considered for young people as a place where they can experiment with their identity and develop their concept of democracy. Teachers should tackle anguish experienced from online activities and foster a positive attitude in this regard.
- **An approach which is proactive rather than reactive:** Actions, policies and projects need to be proactively posed to youngsters and all citizens. It is easy to scare people and teach them about online safety, however we must go further and show the bright and positive aspects of being digital citizens.
- **Lifelong process:** It is important to consider DCE as a lifelong process, which starts at birth and constantly evolves throughout the learner’s lifecycle.
- **Inclusion:** People with disabilities and special needs need to be taken into account to ensure no-one is left behind in DCE.
- **Policy:** Legislation and national school policy needs to clarify the relationship between education policy and private industry. It can be a win-win scenario but we must remain cognizant to the possible dangers.

8.4. Working Group 3 - Preparing teachers for Digital Citizenship Education

Rapporteur: Vitor TOME

Moderator: Janice RICHARDSON

The Working Group comprised of 19 invitees people, the Moderator, Janice Richardson, and the Rapporteur, Vitor Tomé. Professor Jackie Marsh also supported the reporting process during the sessions. This report is organised in five sections, according to the structure previously agreed in the DCE Expert Group.

Objectives of the Working Group

To discuss five core issues:

1. Relationship between DCE and the fundamental goals of education
2. Factors impeding progress of DCE in education systems
3. Factors promoting progress of DCE in education systems
4. Tools and standards to make DCE an integral part of the school curriculum
5. Most essential forms of support to prepare actors to take up this challenge

Key answers to questions which arose during the Session

1. It is crucial to change school culture in order to integrate DCE in the curriculum.
2. Teachers need more autonomy, validated DCE pedagogical resources, assessment tools, and practical training based on sensible practices.
3. DCE should be effective from the cradle all the way through lifelong learning.

What are the priorities to rapidly move forward with digital citizenship?

1. **Community**: We need a forum for educators, industry partners and other relevant stakeholders, including social partners, to collaborate on the development of digital citizenship.
2. **Schools**: We must begin to revolutionise schools – we need to consider democracy in the classroom and consider how schools operate as democratic spaces before we can consider developing DC in the curriculum. We also need to train principals/ heads of schools, so they can lead learning.
3. **Curriculum**: If the curriculum is too detailed, it inhibits teachers' freedom to improvise. Curricula have to be flexible and dynamic, with broad learning outcomes (so that DC competences can be embedded). Instead of being structured by policy makers (in some cases, by those without classroom experience), the process should include the participation of teachers, teacher trade unions, students, NGOs (that are already undertaking excellent work in the area of DC) and other stakeholders, including futurists or even visionaries. Indeed, inclusiveness has to be a critical dimension of DCE. Social dialogue is key to all stakeholders, although there is some doubt with regard to how far business/industry should be involved.
4. **Teachers**: Teachers must receive training (with a focus on interactive practice) as they cannot take this issue forward on their own. They need (inclusive) education, resources and support. Moreover, the process of teacher education should not be top-down. We need to focus on pedagogy and to emphasise pupil-to-pupil and teacher-pupil interaction, including through intercultural interaction.
5. **Resources**: Make DCE validated resources (e.g.: printed, online, apps) available to teachers and students. Teachers should use the internet for dialogue with pupils, enabling them to bring issues to class and to allow democracy to flourish in the classroom. We also need to change the language of the DCE framework to pedagogical language, so teachers can relate to it.
6. **Pupils**: Pupils need opportunities to bring their own day-to-day digital experiences into the classroom in order to reflect on them and further develop knowledge and skills. However,

this may not necessarily lead to productive outcomes and depends heavily on how it is undertaken.

What are the current gaps in digital citizenship education in society and how can they be filled?

Gaps	**How they can be filled**
Lack of teachers' autonomy	Give teachers autonomy
Poor role models	An important role for ambassadors – may enhance motivation if implemented well
Lack of resources for teaching digital citizenship	Peer-to-peer networks, communities of practice, games and easy tools to use - Teachers value specific examples of this in practice
Lack of ability to assess if the materials have been effective if there are not appropriate tools in the national context	Need examples of how to manage particular issues/good practice examples
Lack of knowledge, curriculum framework, resources, infrastructure barriers – e.g. lack of technology and internal barriers such as teachers' habits	Need good teacher education so teachers can develop subject knowledge Effective in-service teacher training
Teachers not understanding the concept of digital citizenship	
Lack of awareness of digital citizenship practice and how it can be implemented in different subjects	Need the message that we do not need to wait for critical incidents but can act preventively in relation to safety issues

What are the implications for the education sector with respect to preparing teachers?

1. We now have a range of evidence (e.g. Chaudron, 2015) that children are using digital technologies from a young age and that parents are not always familiar with issues relating to safety and DC (some parents are using digital technology as a 'babysitter). It is crucial to focus on the early childhood sector, envisaging **formal, informal and non-formal as a whole**, especially given that there are some competences in the citizenship framework that, if not acquired by children in their early years, may never be gained. European Social Network is suggesting training for early childhood practitioners so that they can work and train parents in turn. We should also train other professionals who work with parents (e.g. health visitors who visit parents and babies at home).
2. Involving teachers as researchers is an important area to foster communities of practice. We must also integrate technology into such platforms (for example by using webinars) and shape them within a relevant framework, to enable the effective sharing of DCE practices.
3. A DC certificate, similar to the ICT certificates some countries have, could be created. However, it is important to consider how this is developed and assessed. Teachers should have experience, as well as training/education, in using technologies and reflecting on DC issues.
4. There is a need to develop learning resources and materials. MOOCs and virtual classrooms can also be good options in order to develop DCE.
5. We need to set some guidelines for policy makers to explain why DC is important.

6. Assessment must be an integral part of the curriculum approach to DC. We need different kinds of assessment tools for different DCE functions (e.g. portfolios that can be assessed by peers, parents etc., to promote self-assessment).
7. A range of pedagogical methods is also missing. We need resources for approaches that can be implemented in different cultural and linguistic of contexts. This tool could be interactive so that teachers can input details about their context into the site and get relevant guidance.

8.5 Programme of the conference

THURSDAY, 21 SEPTEMBER 2017

8.30 Registration

9.00 **Plenary Session 1**

Chair: Mr Villano QIRIAZI, Head of Education Policy Division, Council of Europe

Opening speech by Mr Matthew JOHNSON, Director of Democratic Citizenship and Participation, Council of Europe

9.30 **Setting the Scene:**

Competences for Democratic Culture

Speaker: Mr Martyn BARRETT, Emeritus Professor of Psychology, University of Surrey

Key conclusions of the "Literature Review" and "Multi-Stakeholder Consultation Report

Speakers: Mr Brian O'NEILL and Ms Elizabeth MILOVIDOV

Questions from the floor

10.25 **Introduction to the Concept of Digital Citizenship Education**[18]

Roles and Responsibilities for Education Actors

Speaker: Mr Brian O'NEILL

Future Challenges of Digital Citizenship

Speaker: Mr Martin SCHMALZRIED,

Preparing Teachers for Digital Citizenship Education

Speaker: Ms Janice RICHARDSON

10.45 Break

11.15 **Multi-stakeholder Working Group Conversations**

Roles and Responsibilities for Education Actors

Moderator: Mr Brian O'NEILL

Rapporteur: Ms Pascale RAULIN-SERRIER

Future Challenges of Digital Citizenship

Moderator: Mr Martin SCHMALZRIED

Rapporteur: Mr Alessandro SORIANI

Preparing Teachers for Digital Citizenship Education

Moderator: Ms Janice RICHARDSON

Rapporteur: Mr Vitor TOME

12.30 Buffet lunch

[18] (5 min introduction for each theme for working groups)

14.00 **Multi-stakeholder Working Group Conversations** (continued):

15.30 Break

16.00 **Plenary Session 2**

Chair: Mr Sjur BERGAN, Head of Education Department, Council of Europe

Examples of Transformative Change

Applied digital tools and digital citizenship education strategies (Ontario and Estonia)

Speakers: Ms Sherry LIANG, Assistant Commissioner, Tribunal Services - Information and Privacy Commissioner of Ontario

Mr Andres ÄÄREMAA, Head of e-Services Department, Ministry of Education and Research of Estonia

Questions from the floor

17.30 Networking Reception

FRIDAY, 22 SEPTEMBER 2017

9.00 **Plenary Session 3**

Digital Citizenship Education: Young people's experience

Moderator: Ms Janice RICHARDSON

Speakers: Ms Philippine BALMADIER
Mr Diego BERTAGLIA
Mr Neo HIBBARD
Mr Ľuboš PERNOŠ

9.45 **Conclusions of Multi-stakeholder Working Group Conversations**

Chair: Mr Christopher REYNOLDS, Programme Manager, Education Policy Division, Council of Europe

Speakers: Working Group Rapporteurs

10.30 Break

11.00 **Panel:** "*Beyond the boundaries: sharing responsibilities and governance of Digital Citizenship Education*"

Moderator: Mr James DYSON, Founder of Dyson Communications

Speakers: Ms Jacqueline BEAUCHERE, Chief Online Safety Officer, Microsoft Corporation
Ms Divina FRAU-MEIGS, Sorbonne Nouvelle, UNESCO chair "Savoir Devenir"
Mr Ger GRAUS, Global Director of Education & Partnerships, KidZania
Ms Jackie MARSH, Professor of Education - University of Sheffield
Mr Xavier MORALES, User Education Program Manager, Google
Ms Anna Karidi PIROUNAKI, Kindergarten Teacher focused on e-Safety

12.15 **Conclusions by General Rapporteur**

Mr Paul GERHARD

12.45 **Closing of the conference**

Mr Villano QIRIAZI, Head of Education Policy Division, Council of Europe

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