Digital Citizenship

MOOC Canvas and Instructional Design Manual for Digital Citizenship Courses

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DIGCIT

MOOC Canvas and Instructional Design Manual for Digital Citizenship Courses

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Activity	Research and Development. Elaborate specific MOOC Canvases for digital citizenship courses and the Instructional design
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Abstract	Nowadays, more than ever online education plays a decisive role in the future of humanity. The methods used for preparing the course materials will certainly impact the learner engagement, the level of achievement as well as the lifelong impact of the developed skills. In order to propose educational tools adapted to youth needs, the authors consulted hundreds of references, conducted an online survey among European young people and interviews with youth workers. The results were analysed and integrated into the guideline for MOOC Canvas development, which ensures compatibility with young people's needs. Further, the authors exemplified the application of the guideline for 10 Canvas courses for Digital citizenship skills. The second part of this manual introduces the Instructional design concept, which is “a must” for the online learning environment. A range

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	of activity ideas and tools are provided for the course designer to have sufficient arguments for choosing the most appropriate methods and techniques for own learners. With this manual, even the novice teacher will feel empowered to proceed to online course development.
Keywords	Online teaching methods; instructional design, MOOC canvas, Moodle, desk research, methodology, teaching methods, digital citizenship, training, education, digital education, technology, digitalization, youth work, digital word, 5E Model, ADDIE, first principles of instruction, access and inclusion, learning and creativity, media and information literacy, ethics and empathy, health and wellbeing, e-presence and communication, active participation, rights and responsibilities, privacy and security, consumer awareness

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Introduction

Young people today inhabit a world that has been transformed by digital technologies, effortlessly enabling connectedness through social media and access to vast quantities of information. Making sense of this hyper-rich information and engaging effectively and responsibly poses a whole set of new challenges for educators as they seek to prepare young people as citizens, exercising their rights and participating effectively in the affairs of the community (COE, 2020).

Teaching Digital citizenship is challenging. This manual represents the starting point for the development of ten online courses to improve the digital citizenship skills of youth: Access and inclusion; Learning and Creativity; Media and Information Literacy; Ethics and Empathy; Health and Wellbeing; e-Presence and Communication; Active Participation Rights and Responsibilities; Privacy and Security; and Consumer Awareness. Ten MOOC Canvases are developed to introduce the reader to the online course environment offering an overview of the digital citizenship courses.

Creating an efficient and effective digital *synchronous classroom* requires online teachers to develop exceptional communication skills. Twenty-first-century teachers need all the skills required to develop lesson plans for traditional classroom instruction and they must be able to apply them to digital teaching environments.

The challenge occurs while trying to create an efficient and effective digital *asynchronous classroom*. At this point, the teachers really need Instructional design skills. Instructional design is the creation of learning experiences and materials in a manner that results in the acquisition and application of knowledge and skills.

This Instructional Design Manual is created based on the results of the feedback survey (taking into consideration the youth preferences), the responses of youth workers and trainers to interviews (relying on 15+ years' experience in teaching) and the vast scientific research literature. Despite the numerous online courses and scientific articles that are available for developing and improving instructional design skills, very few addressed the teaching methods along with examples, pros and cons.

Therefore, this manual investigates the methods of teaching in an online asynchronous classroom, presents the best practices for creating learners' engagement, as well as concludes be summarizing the main steps for creating an efficient and effective online course adapted to youth needs.

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1. Research methodology and results

This chapter summarizes the research applied for the identification of teaching methods adapted to youth workers and youth people's needs. The results constitute the premises for creating an innovative learning environment for teaching and learning the digital citizenship topic and improving the associated skills.

1.1. Desk research

1.1.1. Description of research methodology

This report undertakes an exploratory approach; it explores the state of the art in youth education, youth policies and youth programmes, it looks into the theories and programs of digital citizenship education and highlights the importance of online tools and programs within the Greek national context.

This report adopts the conceptual review of the literature in order to “synthesize areas of conceptual knowledge” (Knopf, 2006) that will contribute to a better understanding of the issues concerning the research problem under investigation.

For social science studies, systematic analyses are becoming important strategies. Such methods are used to synthesize the effects of the analysis to assess an estimation of cumulative impact for a sample population. A systematic analysis refers to the method by which all available knowledge about an impact is systematically found and compiled (Davis et al, 2014). There are different lenses through which a systematic review may be completed. For the purpose of this national report, the guidelines of the Evidence for Policy and Practice information (Davies and Nutley, 2000) will be used and the following steps will be adopted:

- gathering and describing existing data
- appraising and synthesizing data
- making use of the report for the conduct of further research

The present literature review will sketch the environment of digital citizenship education in the countries participating in the DIGCIT project by:

- featuring the digital citizenship education
- highlighting the existing online training tools and programs
- identifying the current state of the art in the fields of youth work and youth education
- synthesizing the existing data across the national reviews.

The method of a descriptive literature review selects digital data on the key concepts of youth education, youth programs, online training tools and programs within a 20-year time frame, reports the key findings of the research and underlines possible recommendations for the DIGCIT project’s implementation.

The research questions for the review could include the following:

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1) The existing provision of digital citizenship education
   a) what is the existing provision for digital citizenship education in the relevant national contexts?
   b) which is the state of the art of digital citizenship initiatives?
2) The existing provision of online training tools and programmes and MOOC portals in each national setting:
   a) what online tools and programmes are currently available and could be of interest to the project objectives?
   b) which are their limitations?
3) The existing provision in the field of youth work and youth education and accessibility of youth to such types of initiatives:
   a) which is the institutional-legal framework of youth work and education?
   b) who are the service providers in the field of youth work and youth education? Which are and how accessible are youth programmes to youth?

Source: pexels.com

The corpus of the literature review consists of texts published between 2000 and 2020, including:

- peer-reviewed scholarly literature;
- policy guidelines and frameworks for digital citizenship, including those developed by international, national and intergovernmental agencies;
- other official sources including national policies, guidelines and frameworks for youth policy, digital citizenship and/or e-learning;
- national reports;
- books;
- other relevant literature produced by civil society organizations/ grey literature.

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The reasons for the inclusion of such a wide selection of sources are to ensure that we achieve sufficient coverage of an emergent topic that has not yet gained a strong foothold in either educational or academic literature.

In the search engines such as Google, Google Scholar and any academic or training databases partners had access to, the following keywords were used:

- youth work/ youth education/ youth policies
- digital citizenship / digital citizenship education
- youth digital citizenship education
- digital citizenship e-learning
- online training tools
- MOOC portals.

1.1.2. Digital citizenship

There are many attempts to define digital citizenship. Mossberger, Tolbert and McNeal (2008) define "digital citizenship as the ability to participate in society online". The concept of digital citizenship has also been the topic of other books (Ribble and Bailey, 2011), online reports (Common Sense Media, 2011) and lesson materials for teachers (Borovy, 2012; Cable in the Classroom, n.d.; Common Sense Media, 2012). While the term initially referred to online access (e.g. "increasing the number of youth digital citizens", Shelley et al., 2004), more recent publications refer to safe and responsible behaviour online. Ribble and Bailey (2011) defined digital citizenship as comprising the concepts of responsibility, rights, safety and security. Furthermore, Ribble (2015) describes digital citizenship "as the norms of appropriate, responsible behaviour with regards to technology use. […] Good digital citizens work to help create a society of users who help others learn how to use technology appropriately." His goal is to advocate for a positive and unified approach to developing social and educational guidelines for the use of modern technologies.

For Common Sense Media (2011), digital citizenship involves "appropriate technology usage and making safe, responsible, respectful choices online".

The Council of Europe has currently provided the most comprehensive definition of the notion of Digital Citizenship and Digital Citizenship Education. Digital Citizenship is, thus, understood as:

> *"the competent and positive engagement with digital technologies (creating, working, sharing, socializing, investigating, playing, communicating and learning); participating actively and responsibly (values, skills, attitudes, knowledge) in communities (local, national, global) at all levels (political, economic, social, cultural and intercultural); being involved in a double process of lifelong learning (in formal, informal and non-formal settings) and continuously defending human dignity".*

Digital citizenship is better understood as the frame that defines and guides our use of new digital technologies and online behaviour. Digital citizenship is about the ways we use the internet, smartphones and apps creatively and responsibly to communicate, explore, socialize, work, learn and entertain online (Council of Europe, 2017). Similarly, according to Richardson and Milovidov (2016), "digital citizenship and engagement involves [sic] a wide range of activities, from creating, consuming, sharing, playing and socializing, to investigating, communicating, learning and working". The authors conclude that "competent digital citizens are able to respond to new and everyday challenges related

to learning, work, employability, leisure, inclusion and participation in society, respecting human rights and intercultural differences."

While the research on digital citizenship shows that there is no completely unified definition of it, all sources at least share a common ground: Digital citizenship is the ability to participate in society by using digital technologies (but not necessarily online). This sets the background for a rising emphasis in educational settings regarding topics of digital citizenship. The Council of Europe identified ten digital domains that support "the overall concept of digital citizenship":

<table>
<tr><td colspan="4">Being online</td></tr>
<tr><td>1. Access and inclusion</td><td colspan="2">2. Learning and creativity</td><td>3. Media and information literacy</td></tr>
<tr><td colspan="4">Well-being online</td></tr>
<tr><td>4. Ethics and empathy</td><td colspan="2">5. Health and well-being</td><td>6. ePresence and communication</td></tr>
<tr><td colspan="4">Rights online</td></tr>
<tr><td>7. Active participation</td><td>8. Rights and responsibilities</td><td>9. Privacy and security</td><td>10. Consumer awareness</td></tr>
</table>

Practitioners of teaching digital citizenship have also given definitions of digital citizenship, in an attempt to clarify the boundaries of the topical subjects to their students. For TeachThought (2018), digital citizenship is:

- "Self-monitored participation that reflects conscious interdependence with all (visible and less visible) community members"
- "The quality of habits, actions and consumption patterns that impact the ecology of digital content and communities"
- "the self-monitored habits that sustain and improve the digital communities you enjoy or depend on."

For Virtual Library (2020), digital citizenship:

- "can be defined as engaging in appropriate and responsible behaviour when using technology."
- "encompasses digital literacy, ethics, etiquette, online safety, norms, rights, culture and more."
- "is a concept which helps us understand what all technology users should know to use technology appropriately and responsibly."

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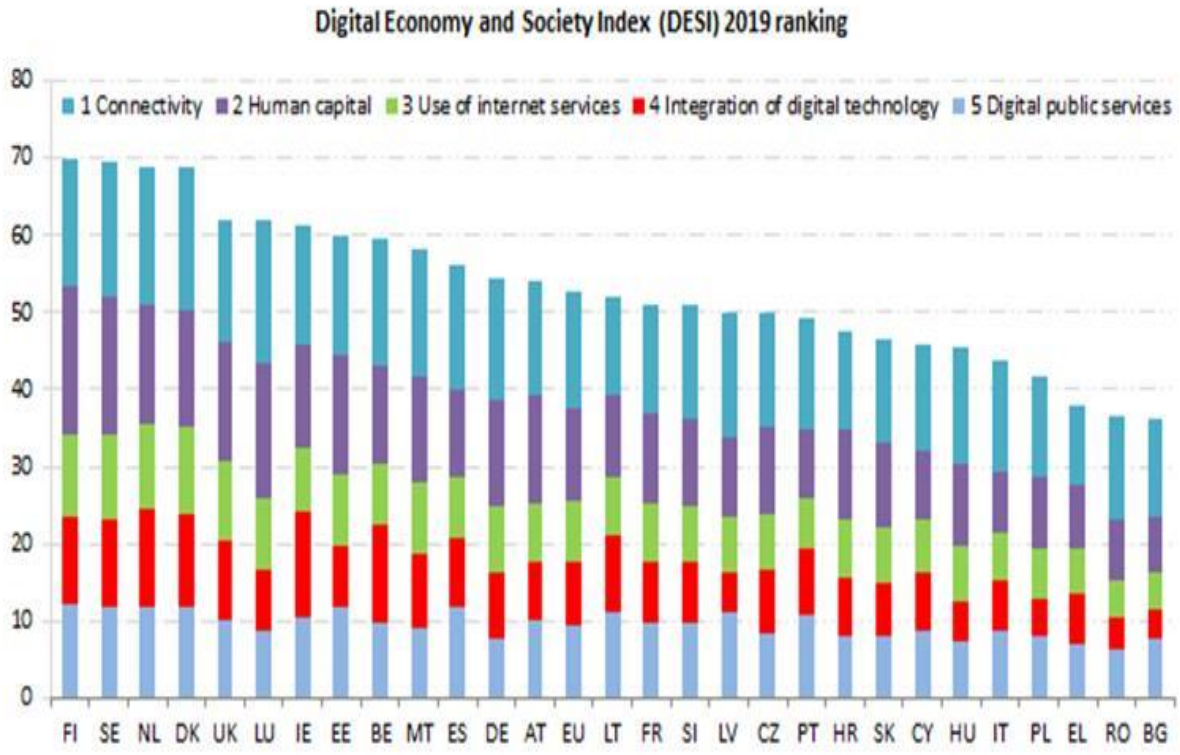
Therefore, digital citizenship is a collective term for a wide set of skills and values, affecting every person, that requires a thorough educational approach, both informal and non-formal learning environments. In addition, it becomes clear that digital citizenship is not only about digital knowledge and skills, but also about attitudes and values.

1.1.2.1. Digital citizenship education in contextual perspectives

Contextual perspectives take into account the relation between individuals and their physical, cognitive and social worlds. They also investigate the socio-cultural and environmental developmental factors and include the lenses through which the research, as well as its analytical methods, claims, observations, conclusions and recommendations can be interpreted. Contextual perspectives also give a hint as to how generalizable the results of a study can be in other contexts.

The Digital Economy and Society Index (DESI) is prepared by the European Commission and monitors Europe's digital performance and tracks the progress of EU countries in digitalization. The Digital Economy and Society Index (DESI) is a composite index that summarizes relevant indicators of Europe's digital performance and tracks the evolution of EU Member States in digital competitiveness.



1.1.2.2. Cyprus

According to the European Commission's Digital Economy and Society index 2019, Cyprus is among the lowest-performing countries and is among the lower 10 scoring countries. This index measures overall country comparative progress in five categories: Connectivity, Human Capital, Use of the Internet, Integration of Digital technology and Digital Public services. Based on this, Cyprus belongs to the Lower performing cluster of Countries. In fact, except for the category "Use of the Internet", it is below the EU average in all categories.

More specifically, in 2016, Cyprus ranked 21st and in 2017, 22nd overall. Though its progress over time is positive, Cyprus nonetheless moves slower up the curve than most countries. Of specific interest is Category 2. Human Capital. On this, and according to the DESI 2017 Cyprus Country Profile, as in most categories, though progress is made, it is slow and skills are still significantly needed across the whole spectrum. This is especially concerning in terms of Digital Citizenship Skills when combined with the above EU average performance of Cyprus in Category 3. Use of the Internet as more and more people use the Internet, but relevant skills uptake is lower. This means that there is an increasing number of users who are not appropriately equipped. These results shape the need for more digital initiatives to be implemented.

In the area of education, as the Education and training monitor 2019-Cyprus notes: the "potential of digital technologies in improving educational practices is being held up by challenges that education systems still face. To successfully undergo digital transformation, schools need to support teachers' digital competence for pedagogical use, design innovative pedagogical approaches and provide digital equipment as well as better connectivity". Although Digital Citizenship is not specifically addressed, it is nonetheless encompassed or could be suggested so. As to this, given the right communication approach, Digital Citizenship Skills in schools as well could very well be explicitly included in these curricula. This is more so as digital skills are integrated into other compulsory subjects in Cyprus that alongside Lithuania allocates the highest number of hours during lower secondary education. Thus, the emphasis already placed on relatable subjects is great.

This momentum, however, as already mentioned, does not only concern schools. As the same report states, digital skills need to be strengthened throughout the population. This is especially so with regards to the labour force, i.e. individuals aged 25-64 who are working or looking for work. In this segment, though the ratio of Low and Basic skills is above (32% and 34% for Cyprus versus 24% and 30% for the EU in total), the EU average, those with above basic skills (22% for Cyprus versus 36% for the EU as a whole) is much lower. These findings come to verify what was stated above. More and more people result in Internet usage and solutions, but this trend is not accompanied by the uptake of relevant skills such as media literacy and digital citizenship competencies.

In General, Digital citizenship in Cyprus is not governed by any specific policy. Beyond the numerous private sector initiatives, several Governmental ones exist. For example, as the Cyprus Education and training Monitor 2018 states: "Citizenship education is a point of focus in digital education. As part of the national digital strategy, each year, 15-20 schools participate in several programmes with a specific citizenship focus. For example, (i) the EU-funded "EduWeb-programme" where children educate digitally illiterate adults on safe and creative internet use; (ii) "eSafe Schools" which helps schools develop strategies for safe and creative internet use; and (iii) "Young Coaches for the Internet" which trains students to develop and apply an annual action plan and educate their peers on creative and safe internet use".

In addition, the Cyprus National Digital Strategy does include several related Items. For example, Action 7.17 aims to Develop tools to promote eDemocracy. The strategy's 3rd objective titled: "Inclusion of all (including vulnerable groups) into digital Cyprus" is enriched with a specific sub-item designated to promote Digital literacy while projects are intended to be uptaken through the strategy concerning Digital Citizenship itself. Furthermore, the Strategic Plan of the Ministry of Education and Culture does include its provisions relating to Digital Citizenship centred on providing a better internet for all children, with emphasis on internet safety.

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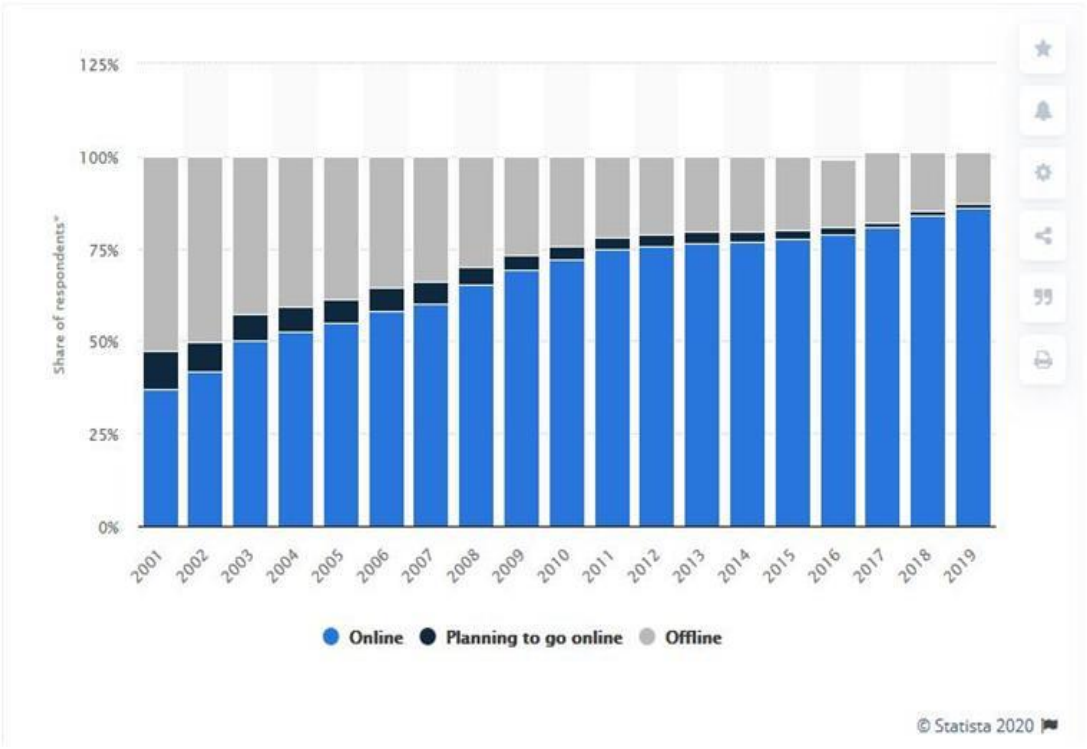
1.1.2.3. Germany

Germany is the second most populated country in Europe, has the most successful economy in Europe and the fourth-largest by nominal GDP in the world. DESI (2019) shows that Germany is placed 12th in the rankings, which include the following aspects: connectivity, human capital, use of Internet services, integration of digital technology and digital public services. Interestingly, comparing the statistics from 2017 it can be noticed that Germany is ahead of Austria, but lost its 11th position in favour of Malta and Spain.

According to the European Commission, "Germany is a leader in spectrum assignment. Germans are above-average users of the internet and their digital skills are progressing well. German citizens and companies are actively approaching the opportunities of eCommerce. However, Germans are reluctant to subscribe to fast broadband. Moreover, with only 19 % eGovernment users, the greatest challenge is to improve the online interaction between public authorities and citizens." Indeed, the digital progress can be noticed – Germans are improving their digital skills needed in the digital world, their usage of the Internet is above average in Europe and they become more open to being actively involved in activities present in digital citizenship. At the same time, they are hesitant to use fast Internet connections. Moreover, there are still less than 20 % of e-Government users, so the online communication between citizens and governments is not optimal. This is perceived as one of the areas that need to be improved.

On the issue of digital citizenship in Germany, various statistics show that a digital divide is present between citizens with and without a computer or Internet access. There are still areas in Germany that do not have access to high-speed Internet. It is available less in rural areas than in cities. Almost 83 million inhabitants are living in Germany and there were over 71 million Internet users in 2016. In the same year, 92 % of the share of households in Germany had Internet access (in 2007 it was 71 %). In 2018, 90 % of German households owned a personal computer. In 2019, 86 % of Germans were accessing the Internet.



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Even though, taking into consideration recent progress in the statistics, there is still 14% of German inhabitants who stay offline. Unfortunately, it is still an enormous number of people – over 11 million.

The German Government is trying to catch up with the digital improvements and effective solutions for the country. Therefore, “Netzallianz digitales Deutschland” has been initiated: “The Network Alliance for a Digital Germany is an initiative of Federal Minister Alexander Dobrindt that is comprised of representatives from the telecommunications industry and politics and aims at developing the infrastructure required for using gigabit applications in Germany by the end of 2025. This common position on a highly interconnected economy and society will be defined in the Gigabit Germany initiative for the future.”

The Network Alliance for a Digital Germany is a good solution as Internet access is crucial in active digital citizenship. However, being a digital citizen also means possessing skills, which enable a person to responsibly use the Internet. Therefore, every German citizen has the opportunity to gain basic knowledge about Digital Society by entering the official website of the Federal Office for Security in Information Technology. On this website, the following aspects of Digital Society (german: Digitale Gesellschaft) are described: E-safety at Workplace, Cloud-Computing; Social Networks, Online Banking, Online shopping, Communication, eGovernment, Smart Devices, Public Wi-Fi, E-Safety and Travelling, Rules of Law in Internet, Online Gaming, Parental Control in Internet and Online Consumer Protection. Those aspects, however, are just small knowledge pills that offer basic information about the chosen topic.

In 2019 on behalf of the digital association “Bitkom”, a representative survey among more than 1000 citizens aged 18 and over was conducted in Germany. The following answers were given to the question: Do you trust that your city administration handles the digital resources in a competent way?

- 66 % of the surveyed trust their city administration when it comes to handling the digital resources in a competent way
- 69 % want improvements in the topic of digitalization in the work of their city administrations
- 63 % can imagine living in a city or municipality with many digital offers
- 56 % declared that "My city is not digital"
- 37 % rated the level of digitization of their community as advanced
- 86% see the greatest need for improvement in the areas of housing, 79% in administration, 78% in traffic, 77% in security and 765 in the environment

The statistics show that even though many technological initiatives were launched in German cities, there is still a huge need for digitalization in such areas for instance security, administration and housing.

1.1.2.4. Greece

Greece ranks 26th out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2019. Greece has improved marginally more than the EU average increase over the last year. The improvement in its score is due to improved performance in some of the measured DESI dimensions.

Greece enhanced slightly its human capital output by raising the percentage of ICT specialists in total jobs for the third consecutive year and raising the number of ICT graduates for the second running

year. In addition, the supply of digital public services has augmented. However, Greece still scores below the EU average.

Media literacy policy from a public perspective is a long overdue and complicated issue in Greece. For years, until the beginning of the new century, it remained mostly under the academic umbrella as a theoretical school of thought about the new digital media. Gradually, however, it has become clear that it is a public engagement responsibility that should involve actors from both the public and private fields. At the moment, two public bodies set the media policy agenda in Greece, the Ministry of Education and Religious Affairs and the Ministry of Digital Governance. The role of each will be briefly presented below.

[a]. The Ministry of Education

The Ministry of Education and Religious Affairs exerts its media literacy policy mainly through the Institute of Education Policy that operates under its auspices. The Institute of Educational Policy provides the scientific research and study of issues relating to primary and secondary education and ongoing scientific and technical support for the planning and implementation of educational policies on primary and secondary education. In this context, and to fulfil its purposes it provides suggestions for programmes of studies, school books and other teaching issues. The curricula are drawn up by the Pedagogical Institute and approved by the Ministry of Education and Religious Affairs.

Despite the multiple reviews and reforms of the school curriculum in Greece, we cannot report a single media literacy policy in the Greek educational system (Andriopoulou, Media and Information Literacy - United Nations Alliance of Civilizations, 2020). Digital citizenship education has never been fully integrated into the school curriculum. Instead, it has adopted a marginalized role since the very first years of its presence. Several reasons have been put forward to explain this, such as the very nature of the Greek education system which is thought to be founded on the old pedagogy system and maintains many conservative characteristics.

The late 00s, however, witnessed the introduction and implementation of a comprehensive initiative in the field of primary and secondary education in Greece, the Digital School initiative. The Digital School initiative targeted the digital upgrade of school educational processes in Greece and included the upskilling of teachers on the use and application of ICT and other digital tools and the development of a fully operational and accessible e-repository of educational textbooks (European Commission, 2014).

In primary schools, there is a weak presence of media literacy issues in the Flexible Zone Programme, but its non-compulsory character leaves the option of teaching to the teacher, according to his understanding of the necessity of the issue. Teachers have not undergone any systematic training on the teaching of media literacy, apart from some sporadic workshops (Andriopoulou, Media and Information Literacy - United Nations Alliance of Civilizations, 2020). In lower secondary school (Gymnasium), digital skills education is compulsory again for one hour per week. Students build on previous knowledge and now learn the use of multimedia applications, internet browsing and various software. It should be noted that in the curriculum it is advised that teaching should not be knowledge-centred. The educational approach should be based on students' inner interests and self-motivation and participatory approaches (Drigas, Bravou, Demertzi and Papagerasimou, 2018). In upper secondary education (Lyceum), ICT education undertakes a more holistic approach. Students are introduced to the need to develop skills and competencies in the use of ICT technologies as learning

and thinking tools, the exploration of the use of digital applications in the modern world and critical understanding of the new digital landscape (Drigas, Bravou, Demertzi and Papagerasimou, 2018).

Furthermore, the Educational Radio-Television of Greece has been very active in practising media literacy. The Educational Radio-Television aims to provide educators and students with an opportunity to learn through the media, how to use and re-use the available video content in the classroom, upload their content, share and evaluate it, thereby following current European thinking in terms of media use in learning. Through a multitude of projects [such as MEDEANET, the European School Radio, prizes and awards, training workshops etc.] the Educational Radio-Television has elabourated a dynamic presence encompassing media and digital literacy in Greece (Andriopoulou, Camera Zizanio, 2017).

[b]. the Ministry of Digital Governance

The establishment of the Ministry of Digital Governance (formerly known as the Ministry of Digital Policy, Telecommunication and the Media) is itself a testimony to the importance the Greek Government places on digitization. The Ministry of Digital Governance and most importantly the National Center of Audiovisual Media and Communication that operates under its auspices have a central role in the field of digital citizenship and digital citizenship education in Greece.

The National Centre of Audiovisual Media and Communication (EKOME) has the mission to foster and promote public and private initiatives, foreign and domestic, in all sectors of the audio-visual industry. The creation of EKOME addresses modern challenges in the audio-visual market, mainly in audio-visual production but also in education, research and archives digitization. EKOME is committed to the need to provide digital citizenship education. In its own words:

“In the digital environment of the 21st century where media act as social catalysts that play a structural role in communication, information sharing and interaction among users-viewers-consumers, it is more than imperative to set up a long-term sustainable media policy reinforcing all media with advanced educational mechanisms towards digital citizenship, a prerequisite for democracy. It aspires to become a media and information literacy creative hub, where exchange of know-how and good practices will cater for all citizens, especially young people, students, educators, academics and media professionals towards an informed citizenry.”

1.1.2.5. Romania

Romania has no official digital citizenship policy. However, there is a national strategy “Digital Agenda for Romania 2020”, which includes:

- ICT for education
- ICT for social e-inclusion

Young people are not identified as a distinct target group. In addition, there is no reference to digital citizenship.

The Romanian curriculum lacks a comprehensive program of digital citizenship at all levels creating a gap in awareness among parents/ caregivers and youth of the importance of media literacy. In secondary and high schools, the curricula include Information and Communication Technology. However, this is mostly focused on acquiring digital skills. On completion of high school and prior to

registering for the graduation exam, pupils need to sit a “Digital Competence” exam, which will assess the levels of their digital skills. The domains included in the exam curriculum include, among others, the topics of online instruments, web editing, IT security and information literacy. Only one of the test providers, Certiport, included digital citizenship in the exam curriculum for the IC3 Global Standard 4. In universities, although information technology is a subject in many technical bachelor's and master's course studies, there are isolated pieces of evidence of digital citizenship courses included in the curricula, e.g. the West University from Timisoara.

Although there are numerous accredited digital competence professional and lifelong learning courses, there are no digital citizenship courses accredited by the National Authority for Qualifications.

Source: pexels.com

However, several civil society organisations working in the field of pupils, youth and adults, along with private firms and public institutions implemented digital citizenship initiatives. "Digital citizenship. Rights and responsibilities on the Internet regarding personal data" was an initiative launched by the Save the Children Organization, within the “Ora de net” (the internet hour) program and was supported by the Ministry of National Education. In this project, over 506,000 children and 130,000 parents and teachers were directly involved in educational activities, 7,400 children benefited from information and counselling and more than 9,100 complaints were made through the specialized reporting line. The Web We Want platform, launched on Safer Internet Day in February 2013 by the Insafe network, aims to help young people make the most of the opportunities online technologies and social media offer to develop key competences and, crucially, become reflective and responsible citizens. The platform includes a handbook for teens, one for educators, lesson plans and e-safety activities for young people. Researchers such as Grosseck and Malita (2019) took initiative and developed Digital Literacy and Citizenship in the 21st Century. These Digital Citizenship OER resources are freely available.

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Online platforms are currently being developed with a handful of online training courses available. For example, in the online course Digital resources for teachers, participants learn about digital textbooks and access free step-by-step utilization guides: technical information about the media they can use, accessing content, explanations about the benefits of digital tools, etc. The course also presents a series of modern digital tools, with the help of which teachers can carry out extracurricular activities with students. They develop skills complementary to the skills acquired in school. A limited range of articles translated into the Romanian language is also available in the public online space, including "8 digital skills we must teach our children".

Therefore, the opportunities for digital citizenship education in Romania are limited in quality, quantity and accessibility. In the absence of these materials, those who want to improve their competences have to access resources and events, which are in English or other languages.

1.1.3. Current provision of digital citizenship projects

On a European level, probably the most important relevant project is the Digital Citizenship Education Project of the Council of Europe. This project aims to empower children through education or the acquisition of the relevant competencies for learning and active participation in the digital world. This project builds on the results of the longstanding "Education for Democratic Citizenship and Human Rights Education" programme of the Council of Europe and the activities of some of its sectors, such as the Internet Governance and Children's Rights sectors. The Digital Citizenship Education Project of the European Commission is comprised of a series of interrelated components such as the following amongst others:

a) a review of the literature on the concept of digital citizenship, current digital education policies and contemporary digital education practices and challenges in schools,
b) stakeholder consultations and debates on policy issues related to the use of ICT and online resources in the school environments and a depiction of the contributions and responsibilities of school leaders, teachers, students and parents.
c) the development of Policy Guidelines for the support of national authorities in developing Digital Citizenship Education policies

Source: pexels.com

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The European Commission, too, mainly through the Erasmus project has funded several projects that seem to bear the potential of contributing to the actions and the activities of the DIGCIT project. The most notable and the most relevant of these projects are the following:

1) Media Literacy in the Digitalised Era project: the project aims to develop relevant and high-quality skills and competences and to open education and innovative practices in the digital era by offering open and free access to the tools to be developed both for participation in the MeLDE and for online assessment and validation of the skills acquired. It also aims to strengthen the profiles of teachers through the professional development course to be developed and the educational pack to be created to support the teaching and learning of digital skills.

2) Digital Media Literacy for Active Citizenship – DIMELI4AC: the project aims to develop a pilot test and evaluate a tool kit which will support schools to establish their own "Digital Media Literacy Action Plan" in order:
   a) To empower young students to become responsible, critical, global citizens for the digitalized and connected world, while creating blended learning opportunities to acquire digital and media literacy skills to safeguard democracy and common values.
   b) To utilize the non-working time of schools to set up "online and in-house digital media literacy labs" and observatories which will endorse the campaign and sign the memorandum of dimeli4ac commitment.
   c) To strengthen the profiles of teachers and in doing so upgrade the quality of teaching / earning services provided in formal schooling.
   d) To promote whole-school approaches towards dealing with cross-sectoral issues.

3) European Media Coach initiative: the main focus of the European MediaCoach project is the improvement of media literacy levels among young people through the development of a large pool of media literate professionals working with youth in schools, youth centres and non-formal contexts such as libraries and museums. Instead of attempting the development of a pilot experimentation project, the European MediaCoach project proposes the scaling up of a recognised and proven innovation in the field of media literacy. More specifically, the European MediaCoach project aims at the replication of practice in the field of media literacy that has demonstrable results with qualitative and quantitative evidence and impact; that of the Dutch National MediaCoach Programme. For several years the Dutch MediaCoach Training initiative has successfully achieved the goal of improving media literacy among children, young people and parents by training youth professionals, notably teachers, librarians, youth workers, government officials and other societal professionals and by offering them the opportunity to study the possibilities and challenges of these new media and new literacies. The Athens Lifelong Learning Institute is one of the core partners of this project.

4) European SafeOnline project: this project expands the Flemish Safe Online Initiative by applying the concept to the larger context of the European Union and more specifically, by representatives from five EU countries: Belgium, Bulgaria, Cyprus, Greece and Romania. Through this project, parents are introduced to the media worlds of their children to answer the principal question of how parents should attend to their children's media use and discuss what their children are doing with media, what they use media for and why they are attracted by media. The Athens Lifelong Learning Institute is one of the core partners of this project.

5) Youth2Unite project: this project has been developed as a result of the rising incidences of hate crime behaviours in young people, Youth2Unite encourages a change in attitude in young people

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and encourages them to consider the impact of their physical or online attacks and to become instead active change agents. This project falls under the broader scope of digital citizenship and media literacy and delves only into the details and the specifics of hate speech - and hate speech online. It is, however, very relevant to the aims and objectives of the DIGCIT project due to its similar approach to dealing with the issues under consideration. More analytically, the Youth2Unite project `results in the development of:

a) a relevant curriculum
b) a youth worker's manual
c) a measurement tool to measure the impact on attitudes of young people undertaking the awareness raining training and
d) a multilingual open resource e-learning portal that will support the delivery of and access to, all learning resources produced.

In addition, the largest contribution in terms of online resources related to digital skills development (not necessarily digital citizenship) is from projects under the Erasmus Plus program, such as:

- eTwinning is a vibrant community that's involved, in its 11 years of existence, with more than 400,000 teachers working in 166,000+ schools.
- the DCDS (Digital Competence Development System) project, which establishes a framework to provide the low-skilled adult European population with the basic digital and transversal competences needed for employment, personal development, social inclusion and active citizenship.
- DGGMLF (Digital Generation Gap in Migrant and Low educated Families) that provides MRS-parents with alternative pathways to improve their knowledge, competences and skills by giving them new opportunities to access adult education.
- DQ Skills is a Strategic Partnership funded by the European Commission under the frame of the Erasmus+ programme where different European organizations specialized in the areas of Training and New Technologies join efforts to develop an Itinerary and training content – for 3 levels (basic, medium and advanced) - which enables any adult citizens to the correct exercise of their digital citizenship.
- SoC (School on the Cloud) is an ICT network aiming to explore new dynamic ways to educate.
- DIGI4EU (Improving students' digital literacy, digital competences, digital intelligence and digital citizenship in European contexts) aims to integrate a short teaching programme about digital literacy (DL), DCO, digital intelligence (DI) and digital citizenship (DCZ) into different EU contexts.
- EMPOWER (Empowering Digital Citizenship through Media Literacy and Critical Thinking) is an Erasmus KA202 project designed to significantly improve people's ability to critically assess the online and social media content they consume and create, empowering them to become responsible, confident digital citizens.

1.1.3.1. Available training tools and MOOC provisions

We live in a digitalized world and nowadays distance learning in the majority of cases equals online learning. Digital technologies have already become an inseparable part of the daily life of Europeans. They are permanently influencing various aspects of social life not only entertainment but also work and education. The European Union has attempted to outline digital skills in DigComp 2.1., which focuses on 5 key competences: information and data literacy, communication and collaboration,

digital content creation, safety and problem-solving. It is crucial to equip young people with the necessary digital skills and provide them with the opportunity to develop these skills as future needs arise.

Source: pexels.com

To improve key competences in digitalization, various online training programs are crucial to be implemented. MOOC – Massive Open Online Course – is a good example of such tools. There are various options available when it comes to MOOCs. Globally, the biggest provider of MOOC Platforms is the USA.

1.1.3.2. MOOC platforms

The most popular educational MOOC Platforms that are used in the European Union are the following:

1. EdX:

EdX is a non-governmental MOOC platform that provides online courses at the university level in a variety of sciences at no cost. It is an open-source software created by the Massachusetts Institute of Technology and Harvard University. Some of its characteristics include:

- Multiple ways of representing information (video, text, HTML pages, external files such as PowerPoint, pdf, word)
- Creating and using QUIZ by presenting the questions in multiple ways
- Support discussion between learners and the teaching mediums
- Job delivery activities and peer review

2. Coursera:

Coursera is a for-profit organization that offers massive open online courses in various scientific fields. Courses last approximately four to ten weeks, with one to two hours of video lectures a week. Such

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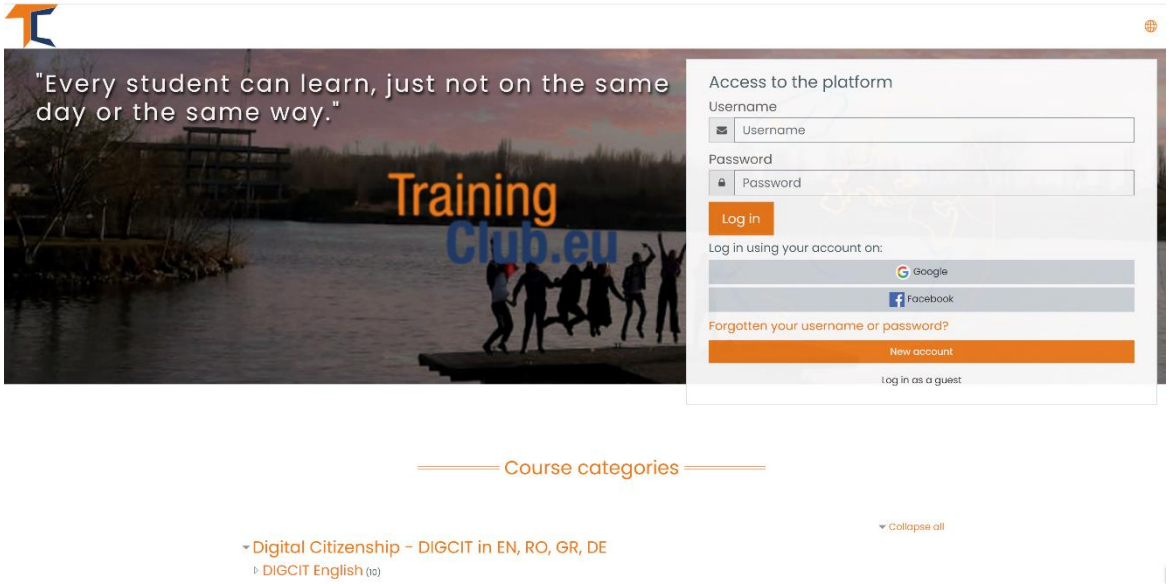
courses include quizzes, weekly tests, peer-graded projects and occasionally a final project or examination. On-demand courses are sometimes offered, in which case participants can take their time to complete the course with all the necessary material at once.

In 2018, Coursera launched six fully online degree courses including bachelor's and master's qualifications in various domains. Digital sciences are at the forefront of this effort with four of the six courses announced either focusing on computer science or data science.

3. Udacity:

Udacity is a for-profit educational organization specializing in more professional courses. Each course consists of several units consisting of video lectures with closed captioning, in conjunction with integrated quizzes to help students understand concepts and improve ideas, as well as follow-up homework, which encourages a "learn by doing" model.



Source: TrainingClub.eu

In addition, other widespread international MOOC platforms in the European Union are:

- Udemy: https://www.udemy.com/
- Iversity: https://iversity.org/
- Khan Academy: https://www.khanacademy.org/
- Canvas Network: https://www.canvas.net/
- Future learn: https://www.futurelearn.com/
- The Open University: http://www.open.ac.uk/

1.1.3.3. Education

In March 2020, primary and secondary schools, universities and even kindergartens across Europe closed due to the coronavirus pandemic as part of government measures to prevent the disease from spreading. This immediately extended to all formal and non-formal education and training actions and activities, which forced massive efforts on the part of service providers to promptly transfer activities into the safe environment of the digital sphere.

These experiences resulted in an astonishing up-skilling of a rather aged educational workforce with available e-learning software and learning management systems and an amazing familiarization of students with digital classrooms. Students of all ages - from very young kindergarten students to adult learners and professionals – study, learn, flourish and interact in their new digital classrooms as if a new momentum is there for the introduction of the DIGCIT learning content and methodologies.

However, universities in the European Union did offer some form of MOOC even before the coronavirus pandemic.

Source: pexels.com

In **Cyprus**, beyond some occasional MOOC individual courses, most are offered in a bundle. The bundle itself is aimed at the acquisition of a Diploma, Bachelor and so on. An example of an occasional MOOC is the University of Nicosia's Free MOOC: Introduction to Digital Currencies. The course is broken down into 12 weeks of teaching and is available to anyone for free provided they register. It also features a live Questions and Answers section. It should be noted that the training and education institutions do offer some of the courses individually, subject to payment. These, however, do generally follow the traditional build-up of basing themselves on preexisting or yet to undertake courses. Beyond this, it should be noted that ANAD the Cyprus Human Resources Development Authority began due to the recent outbreak to offer its courses online and the trend is speculated to continue though this is far from a certainty. Some of the courses may be provided free of charge under certain conditions such as employment status. Moodle is the most often used platform here. Perhaps the most prominent example of Bundled MOOCs is the Open University Cyprus. The University was established in 2002 as a Public University and is the only institution in Cyprus exclusively dedicated to long-distance learning with an impressive variety of MOOCs featured. In 2018-2019 it completed 26 courses with an enrollment of 4100 students. It offers accredited distance learning degrees at all levels meaning undergraduate, master and doctoral. The University utilises several resources such as an electronic

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with a hybrid content with printed, digital and audio-visual material. The material is accessible through EBSCO Discovery Service (EDS), a federated search tool providing easy access. Given that the language used is English for the courses, free English courses are offered through webinars.

Universities in **Germany** were the first ones in Europe that noticed the potential of MOOCs and offer today online study programmes. Some are just certificate courses, while others lead all the way to a Master's degree. Although some of these distance-learning courses entail high tuition fees, Massive Open Online Courses (MOOCs) have also become common in Germany over recent years. Technische Universität München (TUM Munich) began offering globally accessible free online courses early on and is now considered a pioneer in this field. Many German students use American MOOCs as they use English fluently. Nevertheless, many MOOCs are available in German as well as original German MOOCs have been developed, for example, openHPI (Potsdamer Hasso-Plattner Institue), on-campus (University of Applied Sciences Lübeck), iMooX (Graz University of Technology und Graz University), iversity (in the field of Further Education) and OPEN vhb (a network of Bavarian Universities of Applied Sciences).

Source: pexels.com

In **Greece** even before the Covid-19 crisis, all major Greek Universities provided distance learning programmes through blended learning methodologies (Sidiropoulos, Makridou Bousiou and Maria, 2010). Primary and secondary schools too had available important resources that made possible the transference to the digital classroom. The most important is the Greek School Network the official and exclusive service provider of public and primary secondary education. The Greek School Network (GSN) is the national network of the Ministry of Education which safely interconnects 16.079 schools of primary and secondary education, including educational units abroad, services and entities supervised by the Ministry of Education at the central and regional level. The GSN provides services to 1.203.424 students, teaching staff, other educators and other entities of the Ministry of Education.

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The GSN provides the educational community with e-learning services, communication and collaboration, e-government services as well as helpdesk and user support services. Moreover, all major and minor learning management systems can be found in the Greek non-formal and informal Greek educational landscape where adult learning and youth work activities also are found. These learning management systems – open source or not - offer in combination with web conference modules like zoom, webinar, BigBlueButton different e-learning experiences to the users.

Finally, most **Romanian** universities make their courses available to students on online learning platforms. Some universities use Moodle MOOC platforms since the early 2000s. Currently, 90% of Romanian Universities use Moodle as their online learning platform. UniCampus was started in April 2014 by University Politehnica Timisoara, Unicampus offers MOOCs on a version of Moodle platform based on the cMOOCs methodology (Vasiu and Andone, 2014). NOVAMOOC is a UEFISCDI project about the development and innovative implementation of MOOCs in Higher Education, run by West University of Timisoara (WUT) during 2015-2017. WUT offers its first MOOC on the Teachable Platform, "Practicing English with Technology". UniBuc Virtual by Credis (Department of Distance Learning from Bucharest University) developed and ran three MOOCs for Teacher Training on a Google Apps-based platform. "Critical Thinking MOOC" was developed and ran in 2014 by the Maastricht School of Management Romania. University "Babes Bolyai" Cluj Napoca developed materials for four MOOCs through the eLIADA project.

1.1.3.4. Limitations

Although online teaching and learning, especially resources like MOOC, are modernizing traditional education, they might also cause difficulties. Lack of a stable Internet connection or self-discipline can create a situation in which the user is overwhelmed by MOOCs. What is more, there are not many users who are actively and efficiently involved in the realization of MOOCs. Only one in three of those who are registered do and submit homework and take part in discussions. What is also worth mentioning is the problem of social isolation in learning online. Interaction and engagement are not as strong in MOOCs as it is in traditional "offline" learning. Another issue which must be taken into consideration is finally that of the reliability of the MOOC users:

> *"In addition to the general question of how the course of a foreign university can be attributed to the course achievements at the home university, which is also discussed in the Bologna process, there are also specific problems with the MOOCs: How can the identity of a participant be checked on the Internet? How can you ensure that it is he who also solves the tasks of a course and takes the exams - without outside help? And how can you check the level of knowledge of online courses for which up to 150,000 participants enrol?"*

Director of the Hasso Plattner Institute in Germany, Potsdam and initiator of the openHPI education platform, Professor Christoph Meinel, asked how could digital learning in younger age groups be improved taking into consideration that MOOCs are mainly aimed at people who have already left school, answers:

> *"One project I have been trying to advance for a number of years is the so-called school cloud. The idea behind it is to banish computers from schools and make multidisciplinary course content available centrally in a cloud – existing computer centres would be able to do this. The students would then only need display devices – for example, simple tablet computers – and could access this digital content at any time in all their lessons or from home. The advantage for schools: they wouldn't need to constantly procure and support new computers and also*

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wouldn't have to concern themselves with license conditions or installation requirements. Digital learning programmes could already be used in elementary schools."

According to a Research Study from 2020 "Social Inclusion, Digitalisation and Young People" prepared in partnership between the European Commission and the Council of Europe in the field of Youth digitalization is mainly connected with formal education (Information Technologies (IT), Science, Technology, Engineering and Mathematics (STEM)). It would be a great advantage to promote and adjust MOOCs to younger age groups, as young people (14-29 years old) constitute the biggest group of users of the Internet and digital tools.

1.1.4. The institutional legal framework of youth work and education

Various countries have different 'youth' conceptions. Its parameters are typically determined by age, but not always, but the age range is vastly different. In Western Europe, until recently 'youth' was usually considered to be the teenage years, up to 19 years of age. Today, it's more likely to be perceived as running to age 25. Not that youth's upper limits are strictly determined by age; it is also contextualized by, for example, the standard period of retention of young people in school or the average age at which they leave the family home.

Source: pexels.com

The legal framework of youth work and education constitutes an essential part of democracy. Therefore, by providing the institutional and legal framework of youth work and education in the participating countries it is possible to design the implementation of any proposed digital citizenship program and strategy.

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1.1.4.1. The Legal Framework

Youth is considered a national policy area within the EU. The harmonization of member states' legislation is excluded and the role of the EU is only a supporting one. Within this supporting role, the Charter of the Fundamental Rights of the European Union includes an article on children's rights (Article 24) and an article forbidding child labour and providing for the protection of young people in the workplace (article 32).

The existing European national legislations in the youth field address an extensive series of topics relating to:

- youth employment
- sports and leisure
- education family
- deviant behaviour: such as special courts and treatment for juvenile delinquents,
- local youth councils.

In Germany, the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth is responsible for developing and overseeing the federal youth laws, cooperates with the Federal States, and municipalities and is the carrier of the public youth welfare. Since Germany is a federal republic, a manifold of different organisations and governmental branches are responsible for carrying the 8th Social Law, such as the "Landesjugendämter" (English: Federal State Youth Offices) or the local "Jugendämter" in each city. Aside from the 8th Social Law, the "Jugendschutzgesetz" (Protection of Young Persons Act) aims to protect youth in public spaces and the media (depiction and consumption).

Source: pexels.com

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In Greece, two constitutional laws act as the legal foundation of national youth policies:

- Article 16 of the Greek Constitution is concerned with education and stipulates the role of the state in the intellectual, professional, ethical and physical development of young persons. It also sets as the aim the transformation of young people into "free and responsible citizens". The exact content of the article is the following: "Education constitutes a fundamental state objective and aims at the moral, intellectual, professional and physical instruction of the Greeks, the development of national and religious consciousness and the formation of free and responsible citizens".
- Article 21 refers to the obligation of the state to take measures to ensure the good health of young people. More specifically, the exact content of the article is the following: 'The state shall be concerned with the health of the citizens and shall take special measures for the protection of youth, old age, people with special needs and those in poverty".

In Romania, the most relevant law in relation to youth is Youth Law No. 350 from July 21 2006. The law defines young people as having an age between 14 and 35 (comparatively, the Erasmus+ programme addresses youth aged 13 to 30 years old). At the same time, the Youth Law spells out the youth activity as well as the responsibilities of central and local authorities in the field of youth policy. The Youth Law targets all young people, with special attention to vulnerable young people at risk. For this target group, the law provides several rights: housing, access to free education, access to educational counselling, employment counselling and family planning. At Article 4, the Youth Law states the right of young people to:

- Be part of the decision-making processes, especially when the decisions affect them,
- Participate in public life and take individual responsibility,
- Be beneficiaries of support and counselling regarding their education, their economic and cultural life,
- Participate in education, instruction and professional training,
- Access information and the information technology,
- Volunteer for any cause they chose or participate in mobility projects,
- Be beneficiaries of programmes promoting intercultural dialogue and combat racism, xenophobia and intolerance.

Finally, there is no National Youth Law in Cyprus. There exists only a definition of the target population of youth policies that as defined by the Youth Board of Cyprus ranges between 14-35 years old.

1.1.4.2. The Relevant Public Authorities

Cyprus	The Ministry of Education and Culture is the top-level authority responsible for youth policy. The Ministry does not itself manage youth issues but has instead under its auspices the Youth Board of Cyprus which forms the national agency dealing with youth issues in the country. The administrative board of the Youth Board advises, through the Minister of Education, the Council of Ministers about the configuration of a comprehensive and specialized policy on youth matters.
Germany	The Federal Ministry for Family Affairs, Senior Citizens, Women and Youth is responsible for encouraging and supporting youth policy activities in cases where it is of great importance and cannot be supported by each federal state alone. The

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	ministries for youth in the federal states function as supreme state-level youth authorities and therefore are responsible for assisting in the continued development of youth.
Greece	The General Secretariat for the New Generation (previously known as the General Secretariat for Youth) has been the state agency traditionally involved with the development and delivery of youth policies and youth programs. Since 2019, the General Secretariat for the New Generation has merged with the General Secretariat for Lifelong Learning. Today, the General Secretariat for Lifelong Learning - which operates under the auspices of the Ministry of Education and Religious Affairs - is the Executive Body of Lifelong Learning in Greece. It has the mission of designing the public policy of lifelong learning, formulating the relevant rules, preparing the corresponding national program and supervising its implementation. It develops actions in the field of non-formal adult education for the family, with programs for parents, but also with intergenerational interventions, which are often targeted at groups affected - sometimes in combination - by adverse socio-economic conditions or other factors related to gender, age, national or cultural identity or a disability.
Romania	The Ministry of Youth and Sports is the main government authority responsible for the implementation, coordination and monitoring of the National Youth Strategy. At the local level, the Ministry of Youth and Sports created County Structures on Youth and Sports (DJTS) which provide decentralized services of the central authority. These structures cooperate with the central administration bodies for organizing and promoting youth activities.

1.1.4.3. Youth Policies

In 2018, the European Council adopted a resolution on the new EU Youth Strategy 2019-2027. The text proposes that particular attention should be devoted to:

- fostering the participation of young people in civic and democratic life
- connecting young people across the European Union and beyond to foster voluntary engagement, learning mobility, solidarity and intercultural learning
- supporting youth empowerment through quality, innovation and recognition of youth work.

The relevant and current strategies in Cyprus, Germany, Greece and Romania are as follows:

Cyprus	The first National Youth Strategy designed by the young people themselves was approved by the Council of Ministers in May 2017. The strategy was devised by the young with the help of the Youth Board of Cyprus, which consulted more than 3.000 young people. The strategy includes targets and priorities in eight thematic fields that affect the lives of young people in Cyprus directly: (1) Employment and Entrepreneurship (2) Social Inclusion (3) Participation (4) Education and Training (5) Health and Wellbeing (6) Volunteering (7) Youth and the World (8) Creativity and Culture.
Germany	The New National Youth Strategy 2015 aims at creating and promoting fair conditions for youth in society. The implementation of the new youth policy

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respectively the new youth strategy covers: (1) the creation of a youth strategy coordination centre as an information and liaison office for the dissemination of the youth strategy and networking, (2) the development of a so-called 'Youth Check', (3) the setting-up of a working group 'Youth designs future' to support the further development of the Federal Government's demographic strategy, (4) the support of innovative youth policy projects through the so-called Innovation Fund, (5) the creation of a new digital platform for participation, (6) the transfer of European ideas, stimuli and contents from the EU Youth Strategy into national policies and practice, (7) an Initiative for Mobility to support international exchanges and mobility, (8) the draft of the 15th National Child and Youth report about the living environments of young people.

Greece

The Strategic Framework for the Empowerment of Youth (Youth '17-'27) provides the national framework for the development and implementation of youth policies in the country. The "Youth '17 – '27" takes into account the current youth transformations and the prevailing social, economic and cultural circumstances in drafting the principles and the objectives of youth policy in Greece for the decade 2017 - 2027. "Youth '17-'27" is a roadmap. A roadmap with the intent to help all involved stakeholders – the government, service providers, youth organisations and young people themselves – to reinforce efforts and work in a more organised way to achieve more in the field of youth work. The ultimate aim of this document is the development of a clear and integrated strategy that will guide effective public policies for the youth that will adequately correspond to their needs. This roadmap takes into consideration the wants of youth (General Secretarial for Youth and Lifelong Learning, 2018).

Romania

The National Youth Policy Strategy 2015-2020 adopted by the Romanian Government decision in 2015, remains the most relevant national strategy in the field of youth. The Youth Strategy covers the current timeframe of 2015-2020. According to the Romanian Government, the young people were consulted during public debates and their needs were considered before adopting the strategy (Youth Barometers commissioned by the Ministry every two years: 2012, 2014 and 2016).

The Strategy aims at supporting youth to participate in the economic, social, cultural and political life, ensuring equal opportunities for education, employment and decent living conditions for all youth, including vulnerable youth groups.

The Strategy is focused on 5 key areas of intervention:

- culture and non-formal education;
- health, sports and leisure;
- participation and volunteering;
- employment and entrepreneurship;
- the social inclusion of young people.

1.1.5. Youth Work

Young people are commonly called digital natives. According to the Cambridge dictionary it digital native is "a person who is very familiar with digital technology, computers, etc. because they have grown up with them." However, it might be a misleading perception due to the fact that young people

are not born with digital skills thanks to which they are able to use technology in a safe and effective way. Assuming that a person possesses a certain skill just because they were born in the digital era is not entirely correct. It is, however, a fact that young people use plenty of digital devices and it is easier for them to learn how to do it. Therefore, youth workers can fulfil the expectations and demands with the help of online tools, which leads both groups to digital citizenship.

While public institutions and youth organisations are essential for the accessibility of youth programmes to young people, this would not be possible without the people carrying out the youth work. The youth worker acts by encouraging young people to get involved with different activities that would support their inclusion in society by facilitating the process of informal and non-formal learning for young people. Through these learning approaches enacted, young people get involved with relevant learning opportunities that would then contribute to their personal and professional development. These activities lead to the advancement of youth policies in communities.

Youth workers may be paid employees or may volunteer to engage in youth programs. Involvement by both paying staff and volunteers may be full-time or part-time. A wide array of individuals are interested in youth service, ranging from youth professionals to social workers, to teachers, health workers, counsellors and many other professions in between. While there are some indications of youth workers being differentiated upon the basis of the setting where youth work takes place. According to the report "Working with young people: the value of youth work in the European Union" (European Commission, 2014) this manifests itself through:

- Those who provide intervention-based youth work (characterised by open and street youth work) who are qualified social workers or pedagogues and are generally professional salaried youth workers;
- Those involved in youth organisations and NGOs are primarily volunteer-based;
- A tradition of staff in the formal youth work sector. Therefore, it is primarily those qualified as social workers or pedagogues that are found in that area of youth work activities.

The term "Youth Work" in **Cyprus** is broad and includes sports clubs, youth clubs and youth organisations, cultural organisations and others. Since there is no commonly accepted definition of youth work in Cyprus, the people considered as practising youth work do so as part of their broader professional role (as educators, trainers, psychologists, social workers, etc.) but have usually been employed to undertake another occupation/speciality. This being the case, there is no youth workers' association. There is a practice for people with a background in education, psychology, or social work to take on youth-work-type roles, but also people with other degrees undertake similar roles. There are no undergraduate or postgraduate courses in the field of youth work in Cyprus. However, reform is underway and the strategy for lifelong learning will involve Youth Work aspects to be addressed. The need for such a reform is indeed important given the absence of public support structures and measures for Youth Workers. The recent economic crisis had negatively affected this area with relevant budget cuts being implemented or on the way barring more initiatives.

The basic definition, goals and target group of youth work in **Germany** are defined by and therefore closely tied to the German Social Law. "Youth worker" is not used in Germany to describe an official profession. Youth work in the professional field of open youth work/youth welfare - apart from state organisations like kindergartens - is usually connected to "Pedagogics" in general or "Social Pedagogics/Social Work", which is a popular study course in universities all over Germany and requires 6 semesters for a Bachelor degree and an additional four semesters for a Master degree. In 2020, 158

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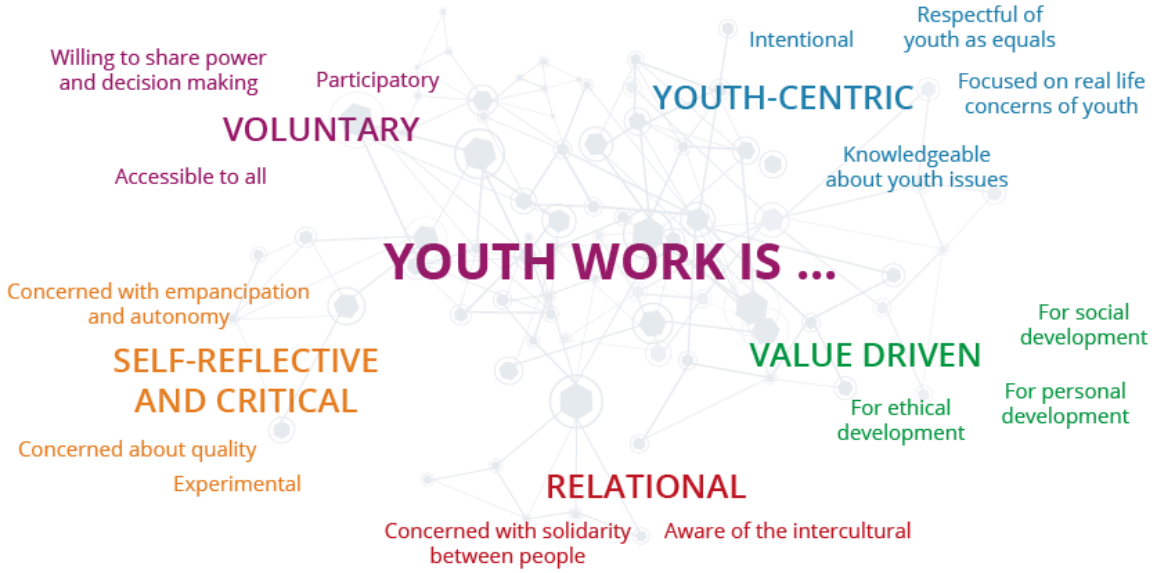
bachelor's study courses in “Social Work” are available at German universities. Youth work in Germany is aimed at children, youngsters and young adults up to 27 years old, independent of their social, cultural, or educational background. According to the law, youth work is provided by youth associations, groups and initiatives, by carriers of youth work and carriers of youth welfare. Its main emphasis lies on the following subjects:

- Extracurricular youth education in combination with general, political, social, health, cultural, nature-related and technical education
- Youth work in sports, games and sociability
- Youth work related to career, school and family
- International youth work
- Recreational youth work for children and youngsters
- Youth counselling

Greece demonstrates a comprehensive set of legal provisions regarding youth issues. However, it doesn’t demonstrate either a similarly comprehensive legal framework or an official definition of youth work for the country. Despite this absence, however, youth work does exist as a social practice and it has traditionally constituted both an indispensable part of the educational and welfare work and an important instrument for the support of the transition to adult life, demonstrating an extensive range of activities that may be placed under the wide umbrella of youth work; such as health, social support, counselling, education and training and so on (Council of Europe, n.d.). Youth work activities in Greece do have great social value. They connect with young people’s recreational and leisure activities, promote young people’s self-reliance and independence and facilitate their transition to adulthood, supplement formal education processes, enhance work and entrepreneurship options, address contemporary social issues such as unemployment and reinforce the participation of young people in democratic life (Council of Europe, n.d.; Ilias Antoniou, 2018).



Source: coe.int

In **Romania**, the first reference to the youth worker is found within the National Youth Law. In the current National Youth Strategy which preceded the law, the role of the youth worker resides with

offering support to groups of young people when going through the transition from school to the labour market, to those dealing with social exclusion or to boosting youth participation. The profession of youth workers is described in the National Occupational Standard which was set in 2012. The standard sets the detailed description of the work that is being delivered by the youth workers as well as the key, general and specific competencies of the youth worker.

The youth worker is the one who mobilizes young people in order to develop life skills and behaviours, stimulating the associative life and cooperation among young people and facilitating their participation in community life. Youth workers act as the resources for young people, organizations and communities, delivering a wide range of activities and services such as information, guidance and support for young people, facilitating their social integration and their personal evolution within the context of enhancing human and cultural diversity and promoting active citizenship.

Those activities take place within a general project of an organization (a non-governmental or governmental – local or central organization that has responsibilities in the field of youth), facilitating their learning process and contributing as well to the development of the relevant youth policies. To become a youth worker, candidates need to attend an accredited 5-days course. Upon course completion, participants receive the Certificate of Youth Worker recognized by the Ministry of Labour and Social Affairs, the Ministry of Education and the National Authority for Qualifications. The certificate recognizes the skills and competencies required to practice the profession of Youth Worker which is included in the Nomenclature of Occupations in Romania.

1.1.5.1. Youth programs available

Youth programs are specific activities designed to involve young people. Included activities are generally geared to youth development through recreation, social life, prevention, intervention, or education. Participants might participate in sports, religion, community service, youth activism, youth service, or outdoor education during youth programs.

Topics covered include empowerment of young people, consumer rights, youth-led media and youth rights. The focus and activities of the youth programs generally depends on the location, culture, class, education and ideals of the individuals and organizations involved. Such services are being delivered internationally by government departments, non-profit organizations and companies.

Cyprus	The Cyprus Youth Council (CYC) was founded in 1996 as an umbrella organisation for youth organisations in Cyprus. CYC is in continuous cooperation with the European Youth Forum. Areas of interest include human rights and equality, employment and social issues, active citizenship and life- long learning, non-formal education and youth policies. In addition, the Municipal and Community Youth Councils prepare an annual action plan and budget, focusing on youth issues. Moreover, they propose local policies relevant to youth issues. They can also give suggestions and proposals regarding the implementation of infrastructure projects, as well as other projects and actions that will benefit young people in their municipality or community. Finally, there is a significant number of youth organisations that are involved directly or indirectly in Youth Work such as student organizations, non-governmental organizations etc.

Germany	Service providers for certain areas of youth welfare are provided by the federal, state or local governments, while they are supported by civil societies that are usually recognised according to the 8th Social Law. It is important to note that youth work does not only mean youth social work connected to "problematic" children but follows a holistic approach. Especially the development of cultural, political and sports youth work lies mainly in the hands of registered associations. The 8th Social Law regulates the "Recognised carrier of open youth work/youth welfare". According to this law, every legal entity, legal person or legal association of persons can be recognized, as long as they act according to § 1 of the 8th Social Law, are non-profit in nature and can reasonably contribute to the goals of youth work and the constitution.
Greece	The role of the non-governmental sector in the domain of youth programs has become increasingly significant in the last few years. Currently, there is a relatively large number of NGOs established in Greece, directly or indirectly addressing issues concerning youth. In 2007, ±270 NGOs in the field of children and youth were operating in Greece. This number is estimated to be even higher if we take into consideration the existence of many NGOs that do offer services to children and youth, although they do not specialize in youth work. These organisations promote volunteering and job mobility for young people, provide social services, facilitate networking and raise awareness and disseminate information among youth on various issues. These are further complemented by new forms of informal organisation and youth expressions that have also emerged, such as informal groups based on spontaneous initiatives aiming to promote creativity and innovation.
Romania	The youth programs in Romania are considered a product of a cross-sectoral approach. At the national level, the youth policy is managed by the Ministry of Youth and Sport. Part of the budget is allocated to admin and staff costs for the Ministry and County offices for Youth and Sport. Since youth is budgeted together with sport, an exact figure cannot be evaluated. With a budget of 4 750 000 euros in 2019, the European Solidarity Corps programme approved, among others, 62 volunteering projects and 49 solidarity projects in Romania. In addition, Romanian volunteers 18 to 30 years old were able to participate in international and in-country volunteering projects. Many of the ESC projects had various categories of young people as target groups and included elements of non-formal education using online and face-to-face delivery.

1.1.6. Accessibility to youth education and programs

In modern societies, significant differences are observed in the way young people enjoy a range of social, economic and political benefits. In fact, a significant proportion of the youth population is currently experiencing severe social exclusion conditions with unequal opportunities in a number of issues such as education, the labour market and achieving a living with dignity more broadly. There is a general recognition that the percentage of young people with fewer opportunities participating in youth activities tends to be much smaller than that of other people (Antoniou, Galani, Giannaki and Magkou, 2018).

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Several relevant bodies have identified the challenges in relation to the inclusion of youth with disabilities to attend youth activities. These relate to a general lack of encouragement by youth organisations and parents to get them involved, fear of working with people with disabilities from trainers and organisations and a generally negative or non-interest by society overall for youth with disabilities and their contribution to the communities. As expected, these challenges combined often lead to a lack of self-esteem among youth with disabilities (Chupina, Mucha and Ettema, 2012).

Accessibility to youth activities is limited also for young people at the risk of social exclusion. Youth who belong to vulnerable social groups experience hindrances in their inclusion in mainstream social and economic life. These youth are frequently those most in need of youth activities. They are young people with a criminal background, substance abusers and HIV-positive youth. They may be school dropouts, inhabitants of remote mountainous and island regions, youth from cultural minorities and/or migrant backgrounds etc.

Young people in **Cyprus** account for about 23% of the population. There are a large number of youth-related NGOs in Cyprus. The needs of young people are addressed through a number of governmental and non-governmental initiatives. Sometimes the borders between youth-related activities are blurred with youth work most often not being included in youth-related activities.

In **Germany**, the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth is responsible for developing and overseeing the federal youth laws in Germany and cooperates with the Federal States, municipalities and carriers of public youth welfare. Some different expectations and needs are fulfilled by youth programs like the following:

- Young people want easy access to offers and places where they can meet peers and find help
- politics and administration want youth workers to comply with regulations and rules that need to be aligned with young people's interests
- youth organizations and associations want to keep their priorities, adjust their offers to young people and keep their responsibilities to their jobs
- youth programs must also react when it comes to current and further development in society, such as demographic change, digitisation, educational and inclusion discussions, migration / young refugees, children's rights and protection, radicalisation/extremism, youth limited time frames, global developments and local financial constraints.

As the **Greek** society undertakes orchestrated efforts toward inclusion, poverty reduction and equitable development, it is crucial that all youth are offered equal opportunities to participate in and contribute to society at all levels. This includes youth with disabilities, youth from disadvantaged socio-economic backgrounds, migrants and refugee youth etc. This is further reinforced by the current dominant discourse on social exclusion and youth work that depicts inclusion in youth work as a powerful instrument for the inclusion of youth in other more pivotal institutions in society. In this context, it is both interesting and relevant to explore any findings related both to the awareness of youth in terms of the available service provisions in the field of youth work and terms of the involvement of young people in those activities. The Internet and social media networks prevail as the main tools for the information of youth and their access to relevant youth programs. According to the findings of a survey undertaken by the General Secretariat for Lifelong Learning - former General Secretariat for New Youth (2012), 48% of the respondents stated that they were informed via the Internet about the activities of NGOs, youth organisations and volunteering activities in their region. However, a 36,7% percentage stated that the level and content of the provided information were not

satisfactory since it did not disseminate systematic, organized and correct information. In recognition of the limited access of youth with disadvantaged backgrounds to youth programmes and youth work services, the General Secretariat of Youth, in collaboration with several Municipalities and Prefectures, finances and supports the Network of Youth Information Centers which provides information and service to young people belonging to vulnerable groups of people. Moreover, by financing youth organisations, the General Secretariat of Youth is enhancing youth workers to take action concerning social inclusion (Moschou, 2012). Furthermore, given this differential access of disadvantaged youth in mainstream youth programmes, several youth organisations have developed and delivered youth programmes mainly targeted towards those young people threatened by social exclusion and experiencing disadvantaged access to mainstream service provision.

In **Romania**, the youth programmes are made accessible to youth people through youth organisations, in many instances in collaboration with public institutions. The public institutions relevant for the accessibility of youth programmes include:

- Ministry of Youth and Sports, dealing with the policy design, monitoring and evaluation of youth policy
- Ministry of Labour and Social Protection, dealing with measures related to social inclusion, social justice and the general framework of youth policies
- Ministry of Education and Research, dealing with elements of validation of learning including the recognition of non-formal education learning paths
- Ministry of Health, dealing with the health-related issues
- The National Agency for Community Programs in the Field of Vocational Education and Training (ANPCDEFP) deals with youth and youth workers' training through local, national and international projects and training activities

In addition, the local public authorities play a coordinating role in providing the framework for sustainable and balanced development of the national territory and ensuring the quality of life of the citizens, including young people. Furthermore, there is a range of regional state agencies which implement, monitor and control the relevant policies and strategies at the local level.

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1.2. Survey for youth

In order to gather quantitative data, questionnaires were sought out with the goal of fully comprehending the relevant topic. Responses from a large sample may be efficiently gathered by asking each participant (respondent) to answer the same set of standardized questions, that will be interpreted the same way by all respondents, to gather the information that describes and explains attitudes, actions and characteristics. The surveys' objectives were to define maintenance-related factors, as well as to look into and explain how maintenance variables connect to one another (Saunders, Lewis, & Thornhill, 2009).

The management of the questionnaire turned out to be a challenging task (Oppenheim 2000), which is explained below. As a result, below there is an explanation of the reasoning for the survey's design and administration, while headings 1.3.2. and 1.3.4. provided space for the analysis of the replies.

1.2.1. Designing, piloting, conducting and closing the questionnaire

1.2.1.1. Questionnaire Design

When designing the questionnaire, a variety of factors were considered, in order to address the overall aim and research objectives (Saunders, Lewis, & Thornhill, 2009):

- Characteristics of respondents;
- Importance of reaching the right respondents;
- Importance of avoiding the contamination and distortion of respondents' answers;
- Sample size;
- Types of questions;
- Number of questions;
- Type of questionnaire, to facilitate the collection of data of the appropriate quality and quantity.

These were discussed in greater detail below.

1.2.1.2. Characteristics of Respondents

The questionnaire aimed at questioning youth respondents and analysing their value judgements and openness regarding digital citizenship.

The perspectives on digital citizenship of people vary by their own characteristics, such as age, gender, occupation, as well as the characteristics of demographic and socioeconomic situations. However, the demographic profile interfered with socioeconomic situations, in order to provide a better picture of the existing situations. This approach required introducing a filtering question to ensure that the variants were relevant to the respondents. This information is important for understanding better the needs and existing gaps of youth people with a focus on digitalization and citizenship.

Overall, this set of characteristics presents the profile of young people with reference to digital citizenship. A summary of respondents' characteristics was included in the table below:

Characteristics	Options	
Country	Romania	
	Greece	
	Germany	
	Cyprus	
Age	13 – 15	
	16 – 19	
	20 – 24	
	25 – 30	
Gender	Male	
	Female	
	Not to mention	
Occupation	School pupil	
	Student	
	Employee	
	Not in education or employment (NET)	
Area	Rural area (village)	
	Urban area (small town up to 100,000 inhabitants)	
	Urban area (large city with more than 100,000 inhabitants)	
Fewer opportunities	No	
	Yes	NEET
		Geographical obstacles
		Educational difficulties
		Social/ family obstacles
		Citizenship/ cultural differences
		Economic obstacles

Source: authors

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1.2.1.3. Type of Questionnaire

The above niche participant characteristics, along with time, cost and data entry constraints, prompted the choice of self-administered questionnaires and more precisely, internet-mediated questionnaires. Thus, the questionnaire was developed and managed using Google Forms (2020) platform.

1.2.1.4. Invitation to Participate

The internet-mediated questionnaire required respondents with a specific professional profile. In this regard, the choice of the type of invitation to participate posed the challenge of achieving the right balance between gaining access to the right participants, contemporaneously with achieving appropriate numbers of responses.

The choice of sending emails to a selected pool of prospective participants appeared to enhance the confidence that the right person has answered. However, considering the time available, the limited participant database available to each partner and specific demographic, social and conditions in each country, we decided to allow each partner a degree of flexibility in the invitation process. As such, the invitation was carried out through a range of vehicles, including:

- Email;
- Internet text messaging, e.g., WhatsApp groups of youth who previously participated in the activities of our organizations;
- Social media, e.g., Facebook closed groups and targeted open calls.

1.2.1.5. Recruitment of Questionnaire Participants

The above approach dispersed the participants geographically and mitigated the risk of receiving uninformed responses (Saunders, Lewis, & Thornhill, 2009) or socially desirable answers (Dillman 2007). At the same time, the approach increased the chances of receiving sufficient responses, with the trade-off being the likely reduced response rate. The risk of gaining responses from participants not meeting the required criteria was mitigated through the questionnaire design, which included category questions.

Prior to commencing collecting questionnaire data, a reminder template was produced. The reminder was then distributed through the above-mentioned communication channels during the data collection period.

1.2.1.6. Data Collection Period

The invitation to interview advised the prospective participants with regard to the questionnaire collection period. The survey was opened in four countries between 09.07.2020 and 03.08.2020. This was considered appropriate for achieving the intended sample size.

1.2.1.7. Sample Size

Although the survey does not carry high statistical significance, a sample size of 150+ responses (minimum 30 per country) was assumed in the project proposal and expected to result in stronger reliability, with sampling distribution close to a normal distribution (Stutely 2003).

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1.2.1.8. Design of Individual Questions

The previously carried out detailed desk research in the four partner countries and the general research carried out at the European level informed the researcher regarding the range of data essential for being collected through the questionnaire, in order to facilitate achieving the research objectives. The data requirements considered specific investigative questions, variables required and measurement questions, all of which were focused on the descriptive and explanatory components of the questionnaire research outcome.

The questionnaire variables were discussed further down below. At this stage, it is of note that variables were designed for investigating various opinions, behaviours and attributes (Dillman 2007). For ease of data analysis and clarity of results (Foddy 1994), standardized questions were designed by the researcher such that they would be interpreted similarly by all participants (Robson, 2002).

Most questions were, in essence, closed questions and provided either a number of choices or a list of checkboxes for the participant to choose. The closed questions include category and list questions (Saunders, Lewis, & Thornhill, 2009).

1.2.1.9. Questionnaire Structure and Length

In total there were 18 questions. The questionnaire included 17 closed questions and one open question. Answering the open question was optional, as well as answering question no.5 (regarding fewer opportunity situations). All other questions required an answer. Among the 17 closed questions, 11 were multiple choice questions while 6 were checkboxes (4 with “select all that apply” and 2 with “select maximum 3”).

In addition to the 18 questions, there was an open question offering the possibility for respondents to write down their email addresses in order to receive the survey results upon completion of the survey data collection period; the last checkbox was participants’ agreement to data collection, sharing and analysis. The field for the email address was optional, but the checkbox for data agreement was required before submitting.

The individual questions and answers were included under the survey results heading. For those completing the survey, a closing message was also elaborated.

1.2.1.10. Language of the Survey

The survey was designed in English and then translated and distributed into the languages of the partner countries. This was done to offer equal opportunities to young people who do not speak English.

1.2.1.11. Piloting the Questionnaire

The survey was drafted in a word processing document by researchers and youth workers from partner organizations, with assistance from the young members of the Youth Advisory Board. Once the questions were finalized in English, the survey was created in Google Forms. The English version was then piloted and checked by the research team and the members of the Youth Advisory Board. Then, the Google Forms survey was replicated for the 4 partner countries and then translated. The translated versions were again piloted in national teams.

The piloting process was followed to confirm the internal, content, predictive and construct validity (Cooper and Schindler 2008). At the same time, the reliability of the questionnaire was tested to assert consistency. Piloting was an iterative process, such that the suggestions from each person piloting the survey were then evaluated and included in the survey as appropriate. Feedback was provided to each contributor, to justify the decision which was taken regarding each suggestion/ observation (be it included or not in the final version of the survey). Fifteen people piloted the questionnaire, some of them more than once. Those who piloted the survey were thanked on completion.

1.2.1.12. Duration for Completing the Questionnaire

The piloting process informed an estimated average duration for completing the questionnaire was in the range of 15 minutes.

1.2.1.13. Questionnaire Confidentiality and Anonymity

Prior to responding to the questionnaire, participants had been informed with regard to the confidentiality and anonymity of data. The survey was anonymous, but respondents had the opportunity to register their email addresses to receive the anonymized survey results. The anonymized survey results were transmitted via email to the respondents who gave their email addresses.

1.2.1.14. Conducting the Questionnaire

After completing designing, piloting and integrating suggestions, the questionnaire was released to collect data. The survey was conducted in accordance with the plan. The respondents were given access to the survey in two ways. Firstly, by email directly from Google Forms and secondly by the Google Forms (2020) web link shared via email and other online communication channels. During the survey collection period, the reminder previously produced was sent out to potential respondents to boost response rates. Following the link to the survey, the respondents answered and then submitted their responses.

1.2.1.15. Closing the Questionnaire

The questionnaire was closed soon after the deadline previously communicated to prospective participants. The survey results were sent to all participants who gave their email addresses.

1.2.1.16. Questionnaire Data

Upon closing the online questionnaire, the survey data were consolidated, processed and analysed. This was carried out with a clear focus on quantitative information, expressed in numerical and charting forms, which were sought to assist in achieving the project aim and objectives. In this regard, the thought process considered and mitigated the risk of generating "*elegantly presented rubbish*" (Robson, 2002, p. 393), by taking a structured and objective-orientated approach.

Considering the numbers of questionnaires collected which was above 150 and the technical conditions, the questionnaire analysis was carried out using a computer. First, the data were downloaded in .xlsx spreadsheets. Then, all the data were translated into English. Thereafter, the data were consolidated into a single spreadsheet. Turning data into meaningful information was carried out by utilizing two processing perspectives. First, a simple counts quantitative data analysis for the frequency of answers' occurrences was carried out for each individual question and relevant graphics

were generated. Then, the research team used pivot tables to carry out more complex non-statistical quantitative data analyses. The Questionnaire data type table below refers:

Question (Q)	Categorical	
	Descriptive - nominal/dichotomous	Ranked
Q1	X	
Q2	X	
Q3	X	
Q4	X	
Q5	X	
Q6	X	
Q7		X
Q8	X	
Q9	X	
Q10	X	
Q11	X	
Q12		X
Q13		X
Q14	X	
Q15	X	
Q16	X	
Q17	X	
Q18	X	

Source: adapted from (Saunders, Lewis, & Thornhill, 2009)

With reference to the coding of data, generally, this had previously been pre-set during the design phase of the survey, although re-coding was considered later while processing the survey data. The entire process was computer-aided, using Microsoft Excel, as previously set out. Prior to and during the analysis, the database was checked for errors, including illegitimate codes, illogical relationships and incorrect application of filtering rules. Considering the sample size and in absence of high levels of statistical significance of the survey, probabilistic weighting cases were not utilized.

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While progressing toward the data analysis, an exploratory approach (Tukey 1977) was initially employed in order to understand the data and its significance in relation to the research objectives. This allowed for flexibility while considering the data type and the associated planned analyses. The results of this exploratory review were set out below.

1.2.1.17. Participating countries

Data were collected using 4 different Google Forms, one for each partner country. This helped us deliver the survey in local languages to make sure the respondents understand the questions. Also, it offered non-English speakers the chance to get involved and provide their answers. Using four collection tools allowed us to compare answers across countries.

Of the total numbers of 157 respondents, 60 were from Romania, 36 from Greece, 31 from Germany and 30 from Cyprus. The figure below refers:

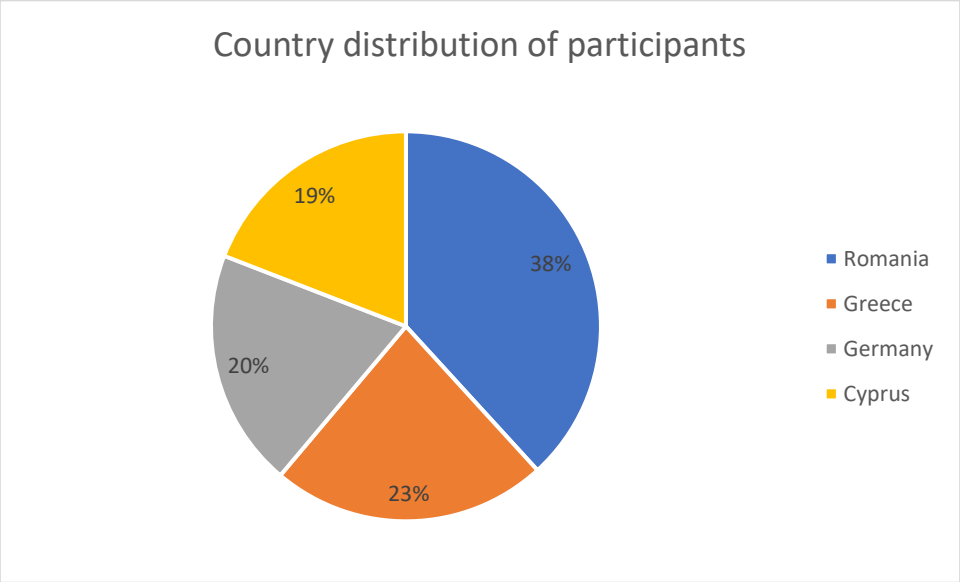

Figure 1.1 Country distribution of participants. *Source: DIGCIT online survey*

1.2.1.18. Question no.1 – Age interval

During the early design stages of the survey, researchers recognized that the target group of 13 to 30 years old is very wide. Therefore, the target group was divided into four age intervals: 13-15, 16-19, 20-24 and 25-30. The interval is narrower for the younger people, reflecting their more rapid changes in terms of needs and preferences.

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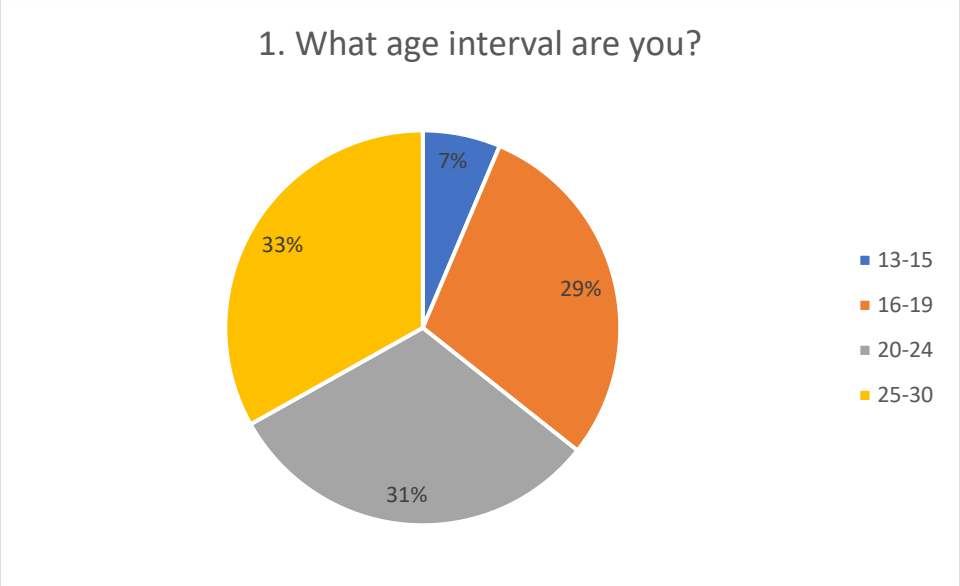

Figure 1.2 Age interval of participants. *Source: DIGCIT online survey*

Responses accounted for all intervals, with comparable numbers of responses for all age intervals, except for the 13-15 years old category, which accounted for just 7%. This is a reflection of the interest shown by the target groups, but also of the reach of the partner organizations among young people.

1.2.1.19. Question no.2 – Gender

A second category question investigated the gender of respondents. This was thought to mirror the interest of male/ female respondents in the digital citizenship topic and the gender distribution of the target groups of partner organizations. One of the multiple-choice answers was "Not to say", for those who did not want to disclose their gender or for those who did not find themselves in any of the male/female categories.

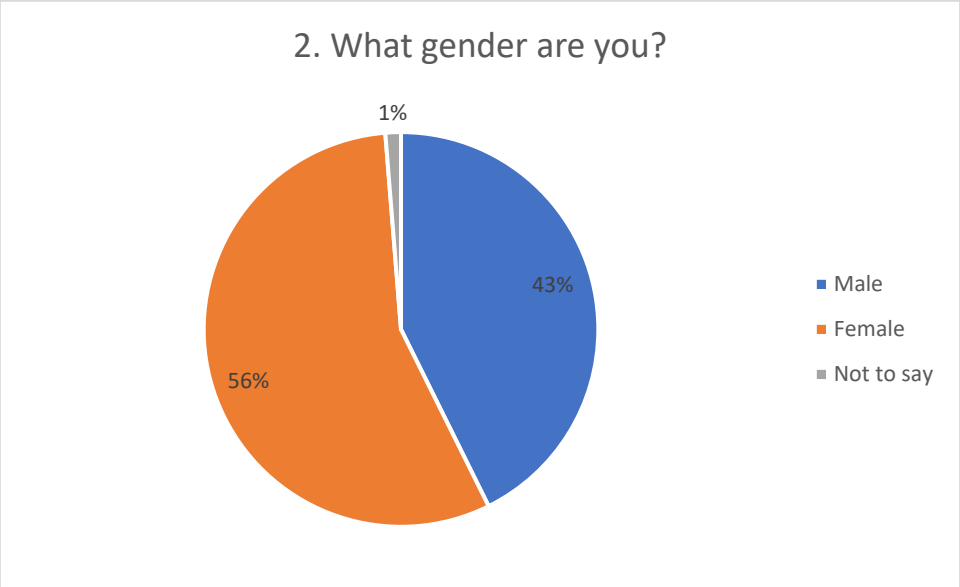

Figure 1.3 Gender distribution of participants. *Source: DIGCIT online survey*

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According to the responses, 56% of participants were females and 43% male. This is considered a balanced distribution which is in line with the project's ambition to support gender equality.

1.2.1.20. Question no.3 – Education and employment category

The question intended to provide an overview of the current education and employment status of the young respondents. This was considered relevant by the research team because people at various stages in their careers may have different needs and expectations.

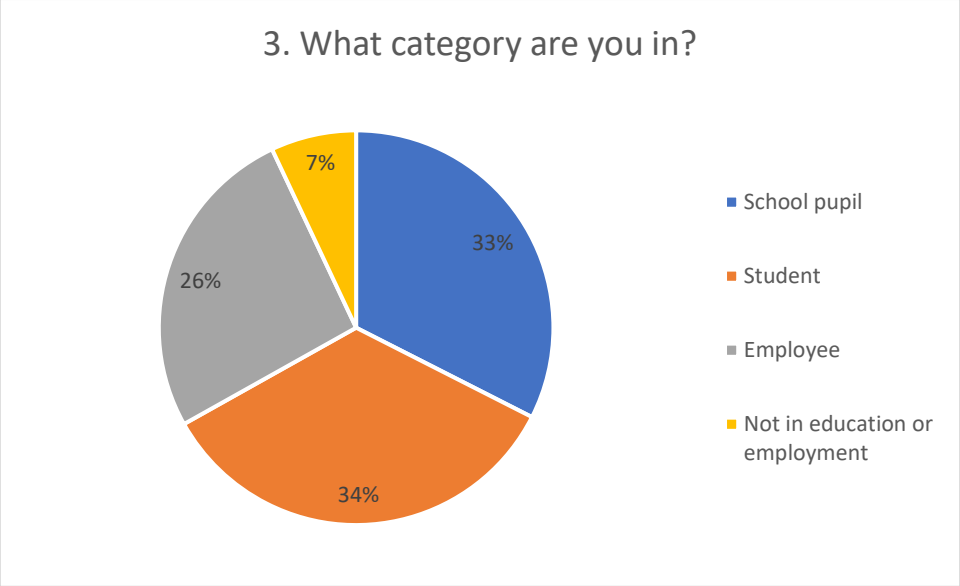

Figure 1.4 Education and employment distribution of participants. *Source: DIGCIT online survey*

Most of the respondents were students (34%), followed closely by school pupils with 33% and employees with 26%. 11 respondents accounting for 7% of the total numbers of respondents were neither in education nor in employment.

1.2.1.21. Question no.4 – Living area

One of the major advantages of the massive online open courses (MOOC) is that people can study from any location, on the condition that they have a smart device and internet connection. Therefore, during the design phase of the project proposal, partners sought to provide an online course for all, including those in smaller cities and even villages.

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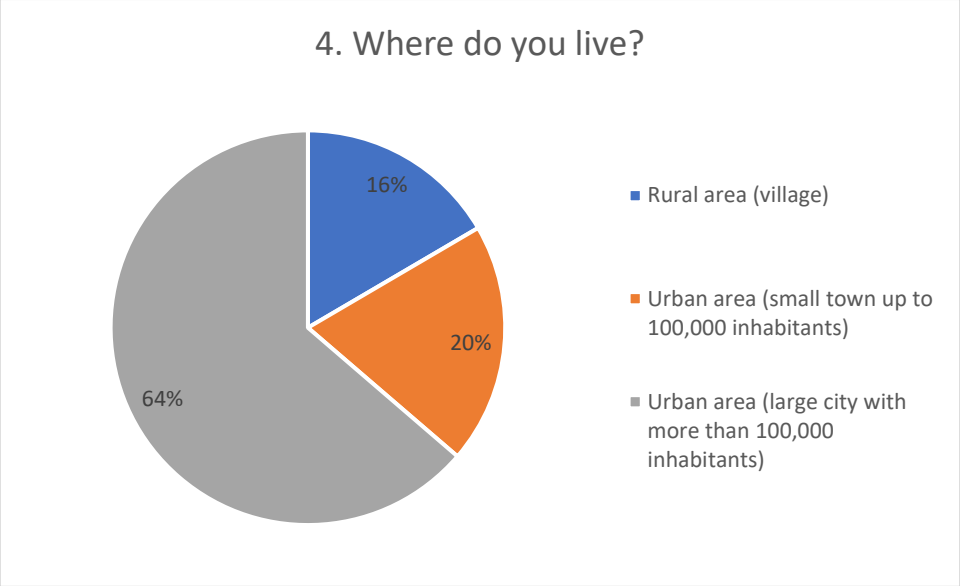

Figure 1.5 Living area of participants. *Source: DIGCIT online survey*

The answers received revealed that most respondents were from large cities (64%), which somewhat reflects the geographic coverage of the partner organizations. However, there was a significant population of 26 participants from rural areas and 31 from small towns.

1.2.1.22. Question no.5 – Fewer opportunities

One of the core values the partnership was created upon is the quest to help young people with fewer opportunities. The research team included the question below to confirm the partnership's capability to reach young people with fewer opportunities and also to be able to later carry out analyses with comparable variables to determine any changes in the attitude or behaviour of these segments of target groups.

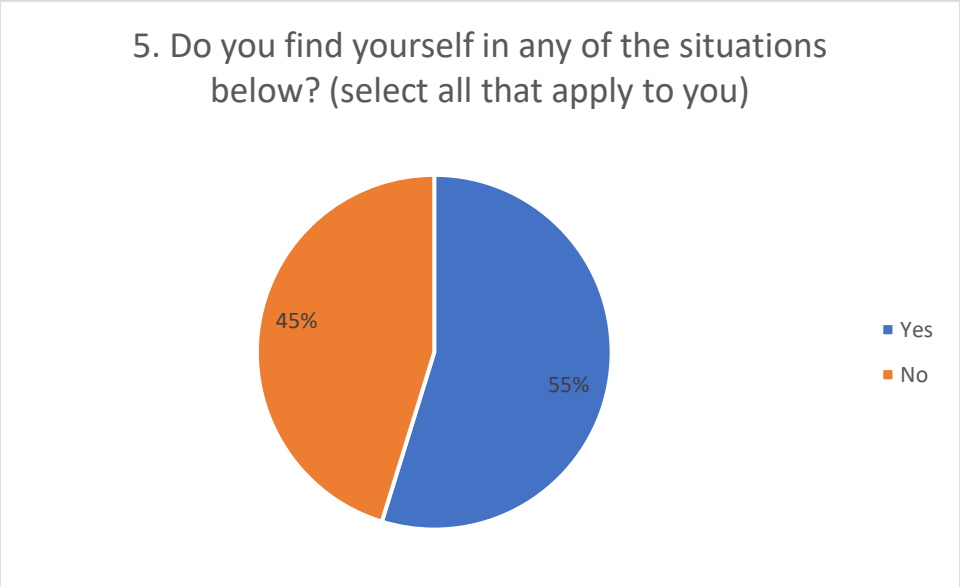

Figure 1.6 Participants with fewer opportunities. *Source: DIGCIT online survey*

DOI: 10.5281/zenodo.7092424

According to the responses received, 55% of survey participants were with fewer opportunities, some of them checking more than one box. This repartition gives confidence that the consortium is able to reach these young people, that the topic is relevant for them and that the survey is able to provide segmented information to help the course design phase.

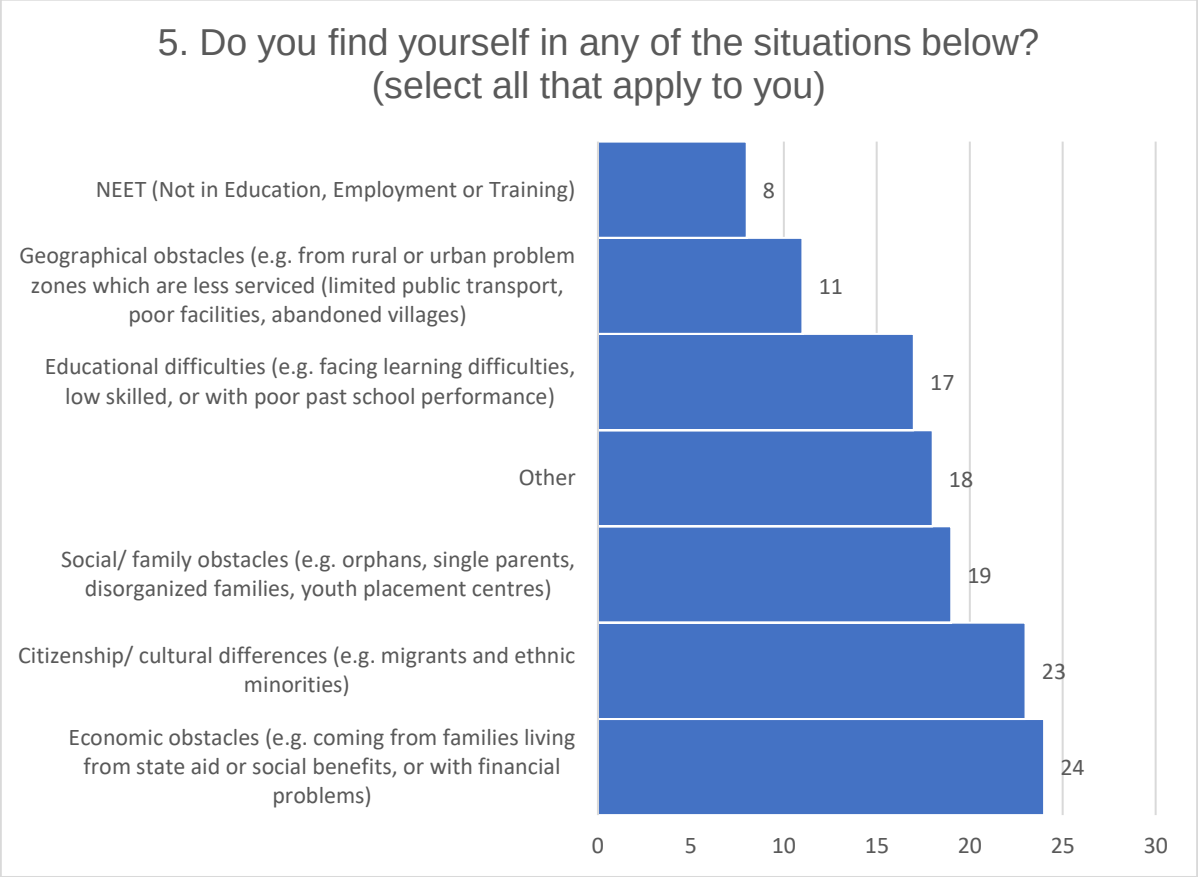

Figure 1.7 Type of fewer opportunities of participants. *Source: DIGCIT online survey*

Most of the respondents are facing economic obstacles, followed by citizenship/ cultural differences and social/ family obstacles.

1.2.1.23. Question no.6 – Digital citizenship courses

Question no.6 intended to expose the share of young people who previously participated in any kind of digital citizenship training.

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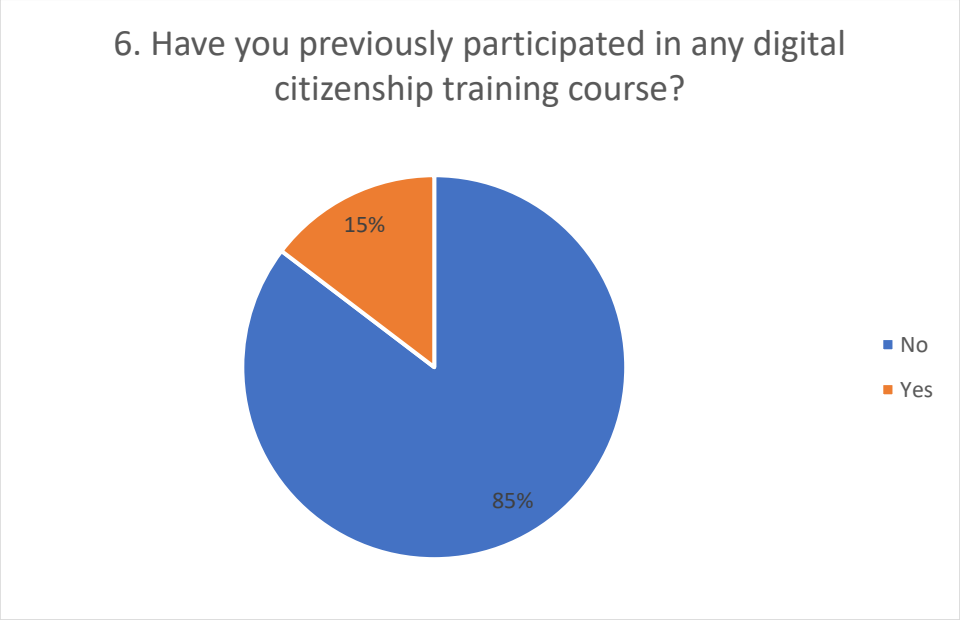

Figure 1.8 Previous experience with digital citizenship courses. *Source: DIGCIT online survey*

As a confirmation of the "raison d'etre" of the DIGCIT project, the vast majority (85%) of respondents did not previously participate in such training. To put this into context, our precursory desk research showed that there is no digital citizenship MOOC in Europe.

1.2.1.24. Question no.7 - Digital citizenship competences

In addition to finding out the population who previously participated in training, question no.7 was designed to show the perceived level of digital citizenship competence among youth.

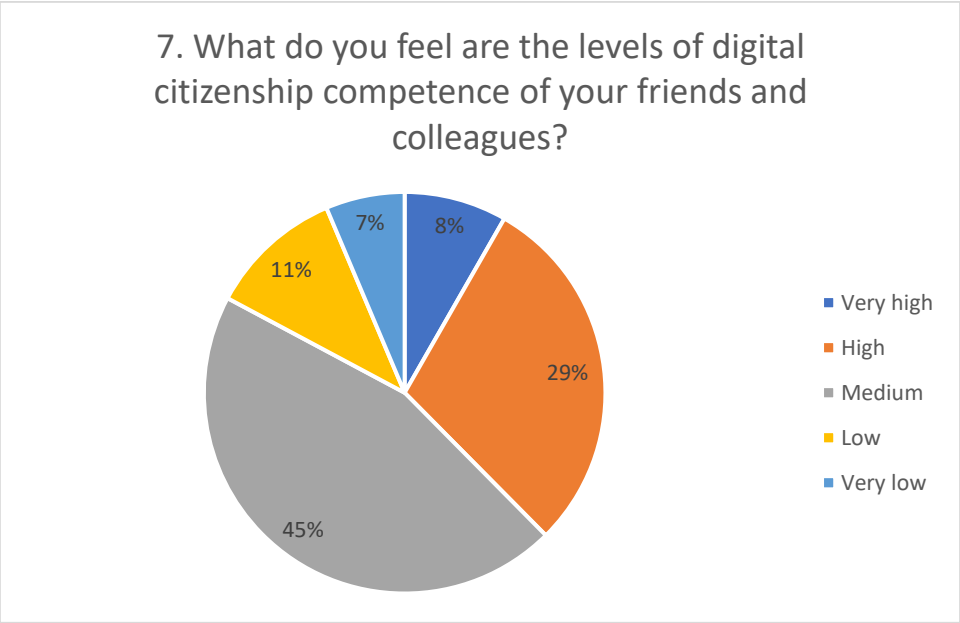

Figure 1.9 Levels of digital citizenship competence of participants. *Source: DIGCIT online survey*

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According to the response simple count, 37% of respondents considered that young people have very high (just 8%) and high (29%) levels of competence. Apparently, some of the young people elevated their skills on their own (without training), or the perceived competence is higher than the actual.

1.2.1.25. Question no.8 – Device

The research team was then interested to know the device used by young people to fill in the questionnaire. The rationale behind it was that this would indicate their preferred devices for online learning.

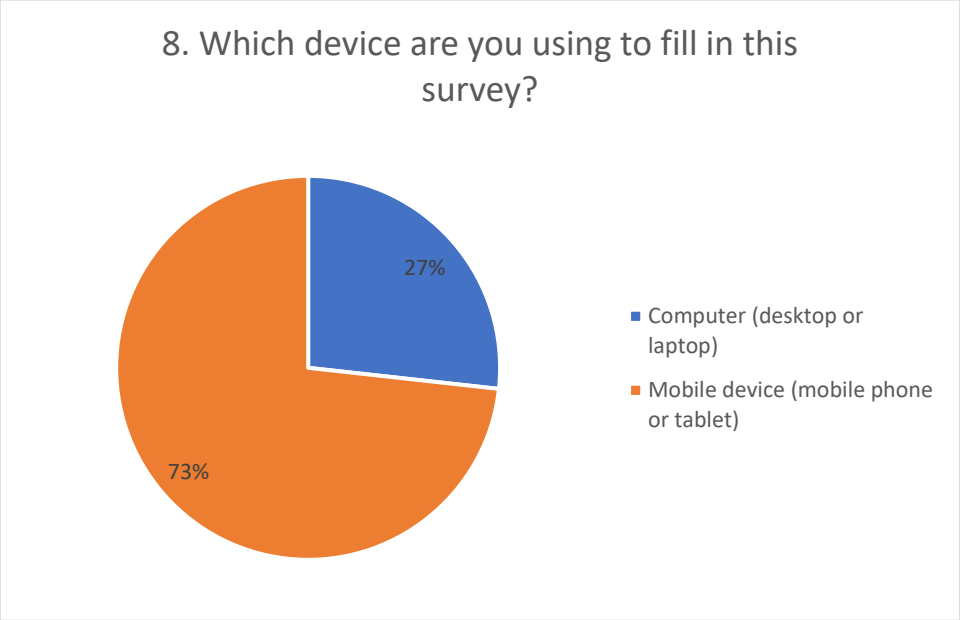

Figure 1.10 Devices used by participants. *Source: DIGCIT online survey*

A vast majority of 73% of respondents were using mobile devices. This is an indication that, if the course was to be user-friendly, it should be accessible on mobile devices.

1.2.1.26. Question no.9 – Learning styles

Question no.9 was designed with the (Honey & Mumford, 1982) learning styles (activist, theorist; pragmatist and reflector) in mind, which are also related to the work of (Kolb, 1984).

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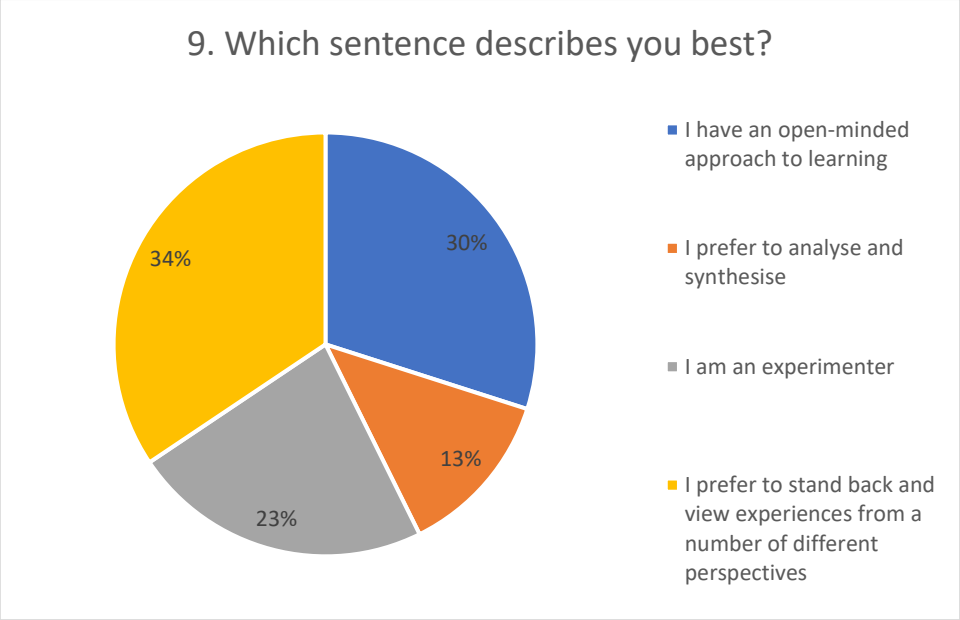

Figure 1.11 Learning styles of participants. *Source: DIGCIT online survey*

In line with what was somewhat expected, the least preferred learning style was the theorist (i.e., those who prefer to analyse and synthesize). Interestingly, most participants prefer to stand back and view experiences from a number of different perspectives (reflector). This is of importance when it comes to online course design and MOOC in particular.

1.2.1.27. Question no.10 – Assessment method

This question sought to offer course designers an indication of the assessment methods which may be used.

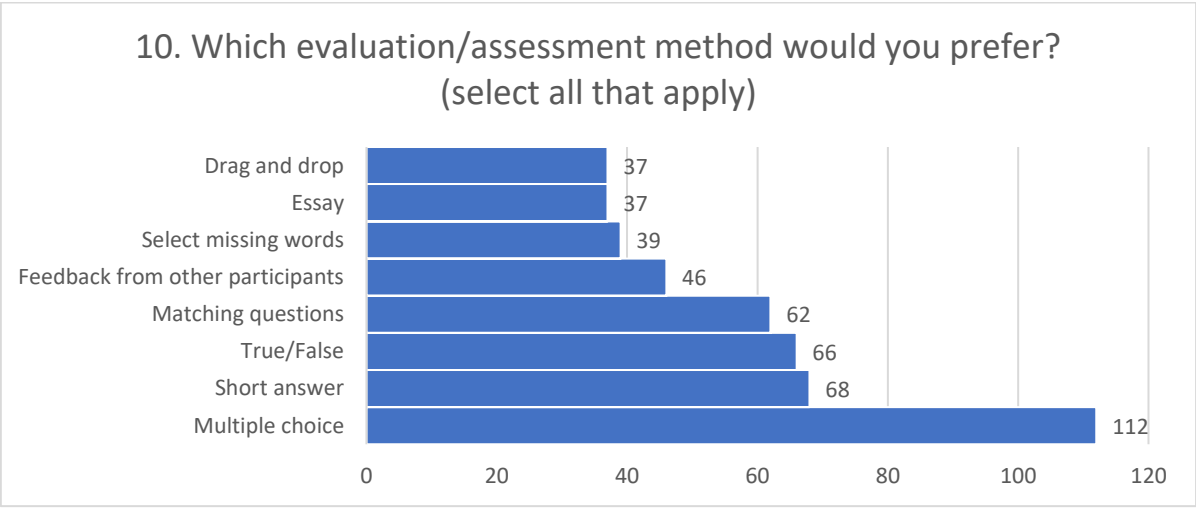

Figure 1.12 Evaluation/assessment methods preferred by participants. *Source: DIGCIT online survey*

The vast majority of respondents preferred the multiple-choice method (112 respondents of the total 157 participants). Other evaluation methods were considered the short answers (68), true/ false (66) and matching questions (62) answers.

1.2.1.28. Question no.11 – Assessment approach

Question no.11 intended to test if assessment quizzes during and at the end of the online training course may be an acceptable solution for the course.

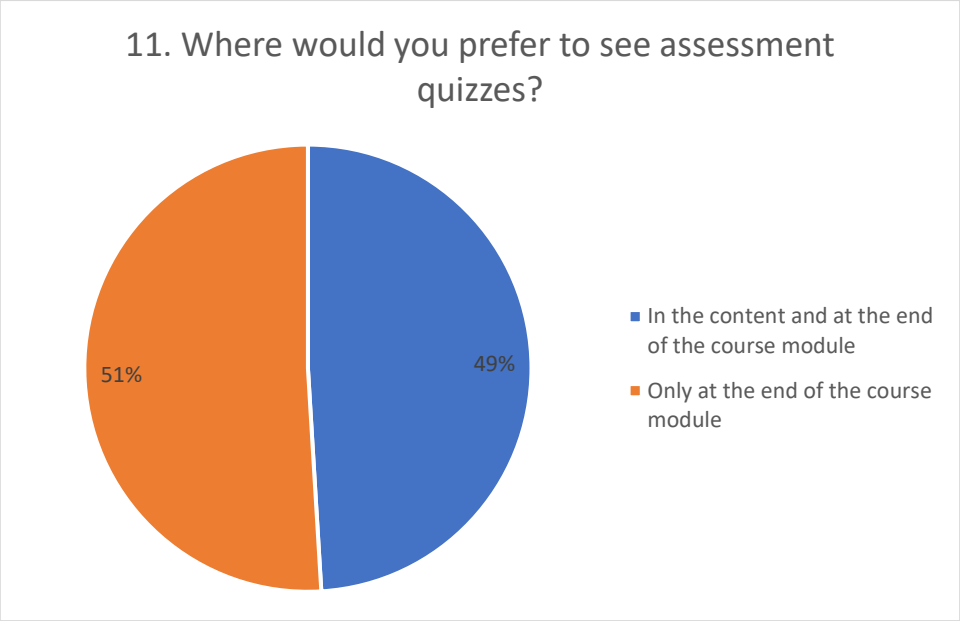

Figure 1.13 Assessment approach of participants. *Source: DIGCIT online survey*

The decision is somewhat split, with 51% of responses pointing to the end of the course, while the remaining 49% prefer the evaluation during and on completion of the course. The results indicate that there is significant support for assessment-based learning, but course designers should examine this option together with the learning objectives and the assessment methods (question no.10).

1.2.1.29. Question no.12 – Weekly study time

One of the key questions when designing an online course is how long the course should be. That depends on how much time a young person would spend for the course on a weekly basis.

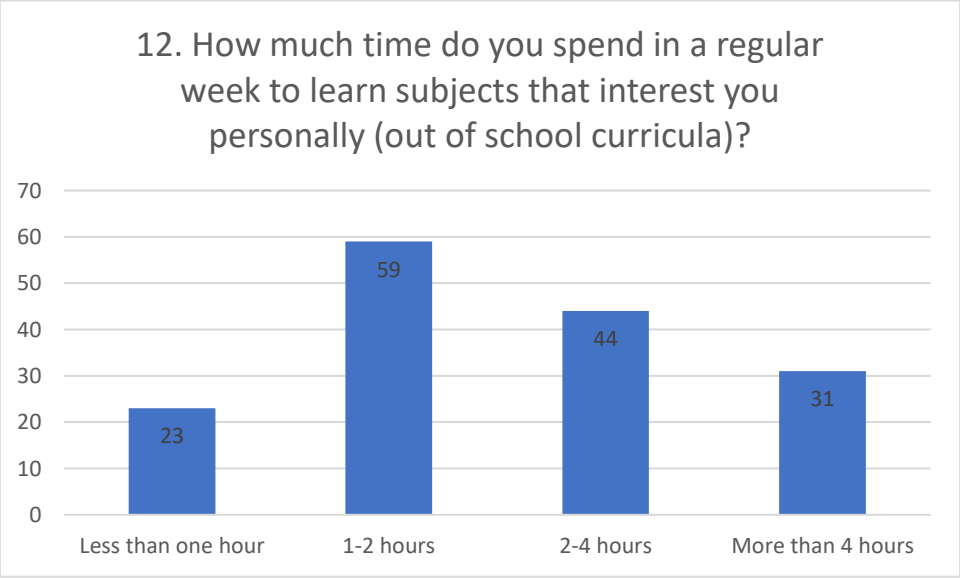

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Figure 1.14 Weekly study time of participants. *Source: DIGCIT online survey*

Most respondents choose the 1-2 hours response (59), while 44 respondents opted for 2-4 hours. Together, the two adjacent categories accounted for 66% of respondents, providing a strong indication of the weekly lengths of courses.

1.2.1.30. Question no.13 – Duration of course sessions

Question no.13 intended to provide insights regarding the best duration of online course sessions.

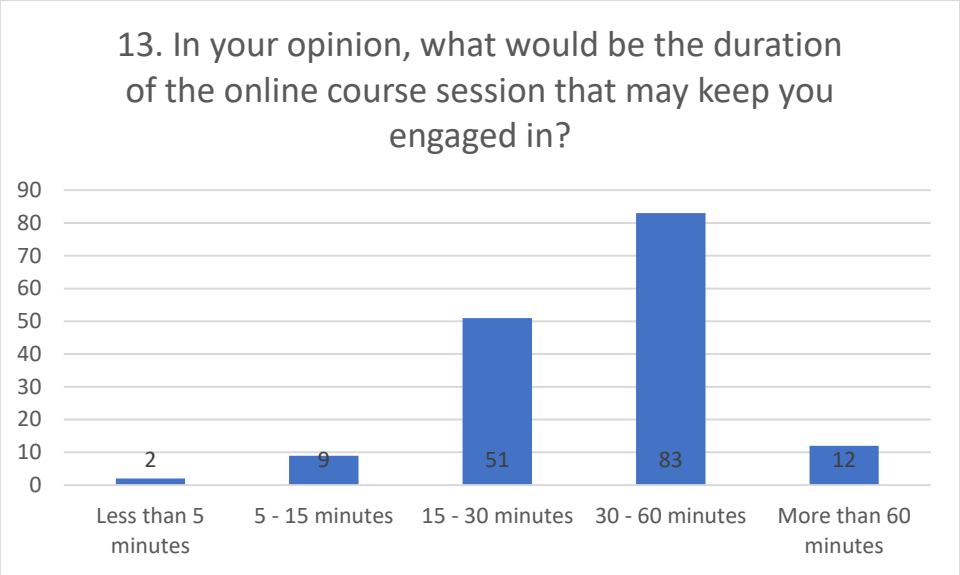

Figure 1.15 Duration of course sessions for participants. *Source: DIGCIT online survey*

While 51 respondents choose the 15-30 minutes duration, the majority of participants (53%) considered 30-60 minutes the optimum duration of course sessions. Therefore, course sessions of 40 minutes may be an optimum duration to satisfy as many people as possible. Also, the course sessions may be composed of smaller modules, to allow participants to stop whenever they feel tired and to pick up from where they left, at their convenience.

1.2.1.31. Question no.14 – Motivation

The research team considered that the youth motivation to participate in the course is important for the course designers and course managers. That is because course designers need to tailor the course in line with the motivation of participants and course managers (e.g., youth organizations or youth workers) need to know how to present/market the course to potential course attendants.

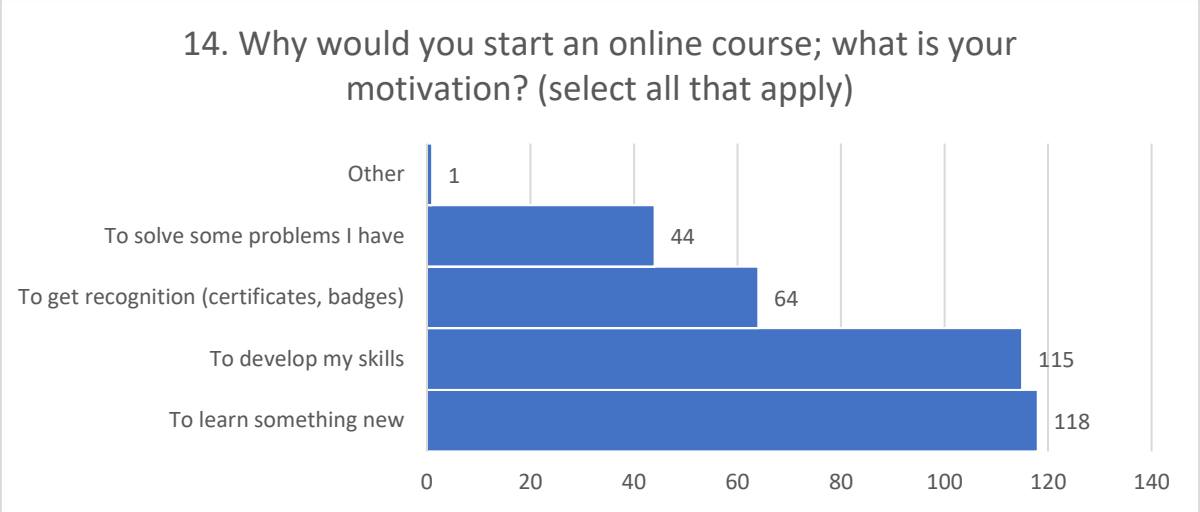

Figure 1.16 Motivation of participants. *Source: DIGCIT online survey*

Most respondents (118 out of 157) to this checkbox question want to learn something new. According to the survey results, 115 young people want to develop their skills, while the recognition was selected only by 64 participants. Hence, the course should be designed such that learners would learn something new, develop their skills and get recognition as a premium for their effort. However, it seems clear that most young people want to learn and develop, rather than just get certificates. In fact, out of the 157 participants, only 6 want just the certificate/ badge.

1.2.1.32. Question no.15 – Course selection criteria

This question aimed to find out what are the criteria considered by respondents when choosing online courses. Participants were asked to choose maximum 3 options between cost, quality, time, flexibility and accessibility.

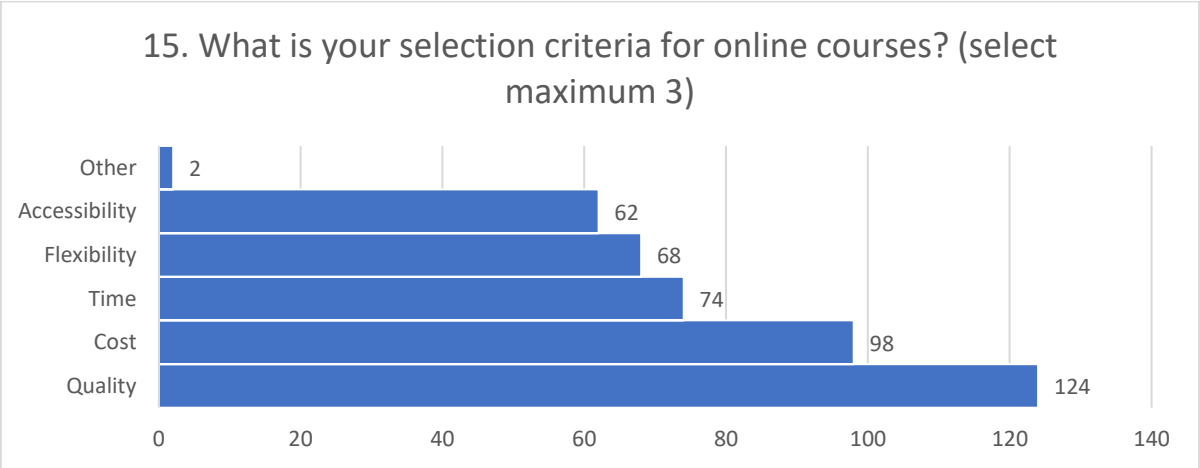

Figure 1.17 Course selection criteria used by participants. *Source: DIGCIT online survey*

Interestingly, most respondents were interested in the quality of the courses (128 responses), followed by cost (98 responses). The time, flexibility and accessibility were considered to a lower extent. As it may appear, young people are interested primarily in good quality courses offered free or at a low price.

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1.2.1.33. Question no.16 – Educational materials

This checkbox question was sought to indicate the methods and online tools which may be preferred by young people for effective and engaging learning.

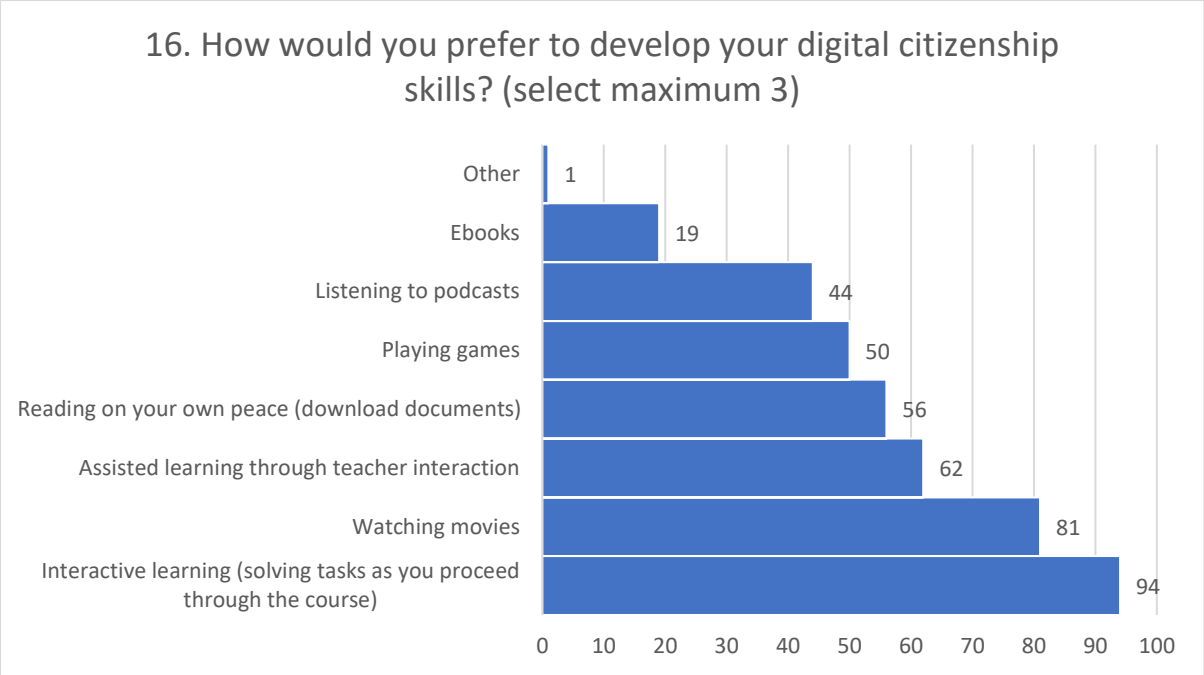

Figure 1.18 Educational materials for participants. *Source: DIGCIT online survey*

The top 2 choices were interactive learning (solving tasks as you proceed through the course) which was selected by 94 survey participants and watching movies (chosen by 81 respondents). Since the methods and digital tools do not exclude each other, a combination of the above may be the best option.

1.2.1.34. Question no.17 – Course added value

Question no.17 aimed to explore the perceived benefits of the digital citizenship course in the eyes of participants. The research team considered these insights useful for developing the marketing messages for the invitation to the course.

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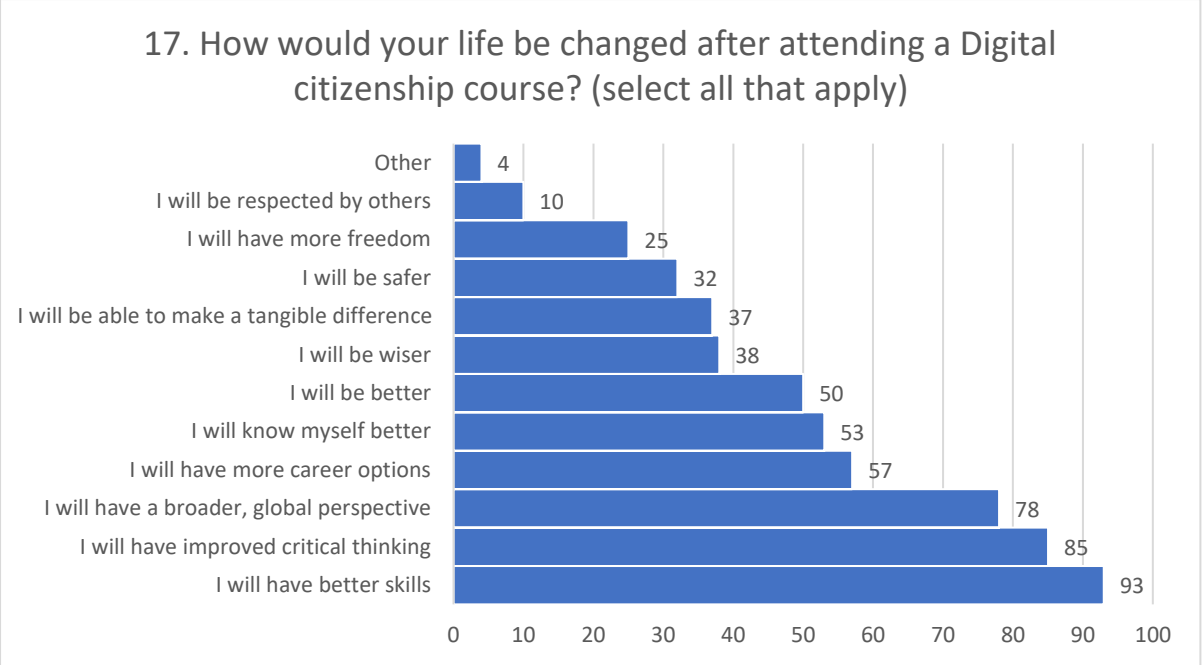

Figure 1.19 Course added value. *Source: DIGCIT online survey*

The top three responses were about better skills, improved critical thinking and a global perspective. The second chunk of preferences included the ideas of career options, self-awareness and being better.

1.2.1.35. Question no.18 – What is a good online course

Question no.18 was an open question: "*In a couple of words, how would you describe a good online training course?*" While all other questions were closed questions aiming to test some of the assumptions and hypotheses which came out from the desk research previously carried out, this question intended to collect ideas and opinions from respondents about what a good online course is for them. Considering that the quality of the course was indicated as the most important course selection criteria, collecting, analysing and acting upon these answers becomes even more important.

The analysing of the answers was done by using coding. A term or brief phrase that symbolically provides a summative, prominent, essence-capturing and/or evocative feature for a subset of language-based or visual data is most frequently referred to as a code in qualitative research.

As a result, coding is a technique that enables you to classify and arrange similarly coded data into "families", categories or groups because they have a common trait, such as the start of a pattern (Saldaña, 2013). The next categories and codes were used for analysing the answers:

Category: Time

Code: SHORT

Code: ONE HOUR

Code: FLEXIBILITY

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Category: Content

Code: PRECISE

Code: CONCISE

Code: USEFUL

Code: QUALITY

Code: DIVERSITY

Code: EXAMPLES

Code: PRACTICE

Category: Interaction

Subcategory 1: Human interaction

Code: INVOLVMENT

Code: INTERACTION

Code: SUPPORT

Code: TRAINER'S TRAITS

Subcategory 2: Digital interaction

Code: GAMIFICATION

Code: CATCHY

Code: USER-FRIENDLY

Code: INTERACTIVE

All the answers from participants and the codes were included below:

[1]Interactive	[1]INTERACTIVE
[2]Short and [3]to the point	[2]SHORT [3]PRECISE
[4]Accessible to all and best defined to understand the subject itself	[4]CONCISE
[5]Attractive and with games, that is, just not to get bored	[5]GAMIFICATION
[6]A course that also generates emotions, adrenaline rushes, suspense, etc.	[6]SENSATIONS

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[7]A course in which all active people online to be involved in the discussion	[7]INVOLVEMENT
[8]Clear, short and comprehensive, to include a basis (text) and the motivational part (interactive part, challenges, [9]contact with other participants, trainer, homework analysed and graded by other participants) + bibliography, [10]links to study independently.	[8]CONCISE [9]INTERACTION [10]DIVERSITY
In my opinion, for an online course to be considered good, it must have a number of basic elements, such as: to be able to keep students active and attentive throughout its development, to be well cohesive and comprehensive and [11]to be able to combine the useful with the pleasant!	[11]USEFUL
[12]I think that a good online course is the one at the end of which the participants feel that they are left with something, that they have developed, that they have learned something new.	[12]USEFUL
[13]A place where you have the opportunity to interact with people who know what they are doing and are knowledgeable (not through certification, but through work experience)	[13]INTERACTION
[14]Qualitative	[14]QUALITY
[15]From which to learn a lot	[15]USEFUL
[16]Interactive teacher, various activities, a lot of communication, teamwork	[16]INTERACTION
[17]Quality, [18]attention, [19]involvement	[17] QUALITY [18]CATCHY [19]INVOLVMENT
[20]A good online course is one that teaches you what you use, what you need, [21]in an attractive way	[20] USEFUL [21]CATCHY
[22]Let it not be a simple speech. The more interactive it is, the better. For example, [23]you can use different platforms with momentary polls or mini-contests held at that time (Moodle).	[22]INTERACTIVE [23]DIVERSITY
[24]Concise, [25]interactive, [26]dynamic	[24]CONCISE [25]INTERACTIVE [26]CATCHY
[27]Let it be a maximum of an hour and a half because that's all I can stand in front of a screen. If I have to make a serious mental effort for certain exercises, the time is drastically shortened. The pace at which the course is held should not be alert but slow and safe. [28]Always present information that helps you in today's life, not like	[27]ONE HOUR [28]USEFUL

the useless information from 12 years of school that leaves traces on my nervous system due to the stress of unnecessary learning.	
[29]Impactful, applicable, memorable, [30]short (but not concise) and [31]to the point	[29]USEFUL [30]SHORT [31]PRECISE
Well, if so, then so be it	
A good online course, in my opinion, consists in the trainer's ability to capture the attention of those to whom [32]he addresses himself directly.	[32]INTERACTION
[33]Organized, captivating, [34]diverse and [35]interactive	[33]CATCHY [34]DIVERSITY [35]INTERACTIVE
[36]Captivating, [37]useful in everyday life, future-oriented	[36]CATCHY [37]USEFUL
As mentioned above: [38]quality, [39]flexibility and durability	[38]QUALITY [39]FLEXIBILITY
To be presented in the form of a [40]short story with simple information to increase the student's interest	[40]SHORT
[41]A good online course catches your attention and you do not lose interest throughout it, it does not let you get bored and deal with something else. [42]It must be presented in an interactive way.	[41]CATCHY [42]INTERACTIVE
[43]Simple, to the point, [44]not too long	[43]CONCISE [44]SHORT
[45]An interactive course, [46]with as many practical examples as possible	[45]INTERACTIVE [46]EXAMPLES
[47]Flexible, [48]quality, affordable, [49]funny	[47]FLEXIBILITY
In safety	[48]QUALITY [49]CATCHY
[50]Efficient and [51]interactive	[50]USEFUL [51]INTERACTIVE
[52]A good online course would be one where you don't get bored and [53]learn something new!	[52]CATCHY [53]NEW

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[54]Play, learn, [55]talk	[54]GAMIFICATION [55]INTERACTION
[56]To captivate me	[56]CATCHY
[57]Practical and affordable	[57]USEFUL
[58]Flexible	[58]FLEXIBLE
[59]Organization and interesting topics	[59]CATCHY
[60]Quality education and [61]trained instructor	[60]QUALITY [61]TRAINER'S TRAITS
[62]Methodical and accurate	[62]CONCISE
Targeted, [63]short and tailored to the needs of the learner.	[63]SHORT
[64]It keeps your attention and interest with various methods.	[64]CATCHY
[65]Detailed to solve all questions but also fun.	[65]CATCHY
[66]Interactive and targeted.	[66]INTERACTIVE
[67]To be interactive and essential and to push the progress of the participants	[67]INTERACTIVE
[68]Easily accessible and flexible in the ways of learning	[68]FLEXIBLE
[69]Providing support from a teacher or instructor during and after the lesson	[69]SUPPORT
[70]The lesson should be done by a teacher who is interested in solving my questions, but also to give exercises related to the taught material.	[70]INTERACTION
[71]Include practice and keep your attention in a fun way	[71]PRACTICE
[72]Understandable, user-friendly	[72]USER-FRIENDLY
[73]Interactive and with audio-visual material	[73]INTERACTIVE
[74]interaction, [75]quality, depth of knowledge, self-assessment test	[74]INTERACTION [75]QUALITY
[76]To be able to watch it whenever I really have time.	[76]FLEXIBLE
Easy, [77]short and understandable to the public.	[77]SHORT
[78]Flexible and accessible to everything in terms of cost	[78]FLEXIBLE

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creative, [79]interactive and lots of visual aids	[79]INTERACTIVE
[80]Not too expensive, [81]but still high quality.	[80]FREE [81]QUALITY
[82]Compact and [83]with interdisciplinary application examples	[82]CONCISE [83]EXAMPLES
[84]interactive, [85]compact, versatile	[84]INTERACTIVE [85]CONCISE
[86]No face-to-face teaching, varied perspectives, things that I cannot simply teach myself with a tutorial	[86]NEW
[87]Entertaining and appropriately demanding	[87]CATCHY
[88]Appropriate group size where everyone has the chance to have their say.	[88]INVOLVEMENT [89]CONCISE
[89]Briefly and to the point	[90]SHORT;
[90]Short, [91]informative, [92]interesting	[91]USEFUL [92]CATCHY
[93]In a nutshell, all the important things	[93]CONCISE
[94]Informative, [95]interactive, [96]interesting	[94]USEFUL [95]INTERACTIVE
A good online lesson would be interactive, with frequent feedback and [98]great participation of the participant through exercises-questions-assignments.	[96]CATCHY [97]INTERACTIVE [98]INVOLVMENT
[99]Short, [100]very high-quality graphic user interface and [101]trainers	[99]SHORT [100]QUALITY
[102]interaction of learners and teachers, [103]interesting tasks, [104]participation	[101]TRAINER'S TRAITS [102]INTERACTION
[105]When the teacher is understanding and friendly	[103]CATCHY [104]INVOLVMENT [105]TRAINER'S TRAITS

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[106]Short and object-oriented, with short quizzes to understand material	[106]SHORT;
[107]Cooperation between teachers and students and not a one-sided lecture.	[107]INTERACTION
[108]In a good online course one should definitely have easy access to it, it should not bring any difficulty to the user. [109]In addition, it should be of interest to the one who attends it regardless of age, it should have something special in order to win the "students" but even if it proves to them that they themselves benefit from it, it is not a waste of time. [110]Finally, in a proper online course, there must be a specific strategy, everything must be clear and understandable to the public and they have as few questions as possible and if of course there should be a way to solve them.	[108]USER-FRIENDLY; [109]CATCHY [110]PRECISE [111]USEFUL
[111]Comprehensive, responding to modern conditions and not to older theories [112]by specialized trainers/coordinators.	[112]TRAINER'S TRAITS
[113]Learning while having fun playing games etc.	[113]GAMIFICATION
[114]Flexible, [114]Easy to access, offers knowledge opportunities to people who do not have much time	[114]FLEXIBLE [115]USER-FRIENDLY
[116]A good online course should be interactive	[116]INTERACTIVE
[117]short, comprehensive, [118]taught by prestigious individuals, recognized certification at the end of the course, [119]practical results and [120]flexibility in attendance	[117]SHORT [118]TRAINER'S TRAITS [119]USEFUL [120]FLEXIBILITY
[121]Enlightenment	[121]USEFUL
[122]Interactive, [123]to offer practical knowledge	[122]INTERACTIVE [123]USEFUL
[124]Be interesting and [125]do not last long	[124]CATCHY [125]SHORT
[126]Be interesting, [127]comprehensive and certified	[126]CATCHY [127]CONCISE

It can be seen from the data above that the interviewees focus on three main aspects: the time of the course, the content and the interaction.

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Time

Correspondents describe that a good online training course should not last long, but be short. There is also a recommendation for a one-hour length. What is more, because it is an online course, the correspondents wish it to be more flexible, so that they can attend the course anytime.

Content

Many correspondents describe a good course as a precise and concise one which is easy to accessible and to the point. Furthermore, the course should be useful for the participants in their everyday life and future-oriented. Another remarkable aspect is that many participants admit that the course must be qualitative, but at the same time this term is vague because it is not specified what makes a course to be really qualitative. What is more, a combination of theory, examples and practice aspects is desired.

Interaction

The interaction is divided into two subcategories: human interaction and digital interaction.

The first subcategory, human interaction, exists even if the topic is about online courses. The emphasis was on the human interaction: trainees-trainees and trainees-trainer that facilitate the learning process. That being mentioned, there is a need for finding the best solutions in order to involve all the students in learning. Therefore, the vocational training of the trainers must be necessarily qualitative in order to ensure the support that the students need.

The second subcategory, digital interaction, depicts the main key to arise the students' engagement. Gamification is one of them, where trainees can play and get easier attracted to the course. Regarding the interface, it should be user-friendly, meaning it is easy for people to use and access it. Moreover, the interactive characteristic should be one of the priorities because it involves the students and makes the course to be pleasing and easy to remember.

All things to consider, there exists a series of principles which make an online course to be a good one following even characteristics of the face-to-face ones.

1.2.1.36. Email address

In the survey invitation, we have made clear that all the answers will be anonymized and the names of the respondents will not be made public. However, the research team wanted to thank the survey participants for their time and effort to participate and offered the possibility for participants to fill in their email addresses in order to receive the survey results upon closing. The main point is to find suitable characteristics that transform the course into an interactive and catchy one.

Figure 1.20 Email addresses of participants. *Source: DIGCIT online survey*

While all the respondents were interested to help our initiative and share their opinion, 37% of respondents left their email addresses in order to receive the survey results.

1.2.1.37. Data processing agreement

The last field to fill in during the survey was the data processing agreement. This was a required checkbox, which allowed project partners to share the survey and analyse the aggregated survey data. By design, all survey respondents checked this box.

1.2.2. Data Analyses with comparing variables

Upon completion of the analysis of individual questions, a more in-depth analysis was carried out, in order to examine interdependencies and to provide an interpretation of the results. Since the results data did not carry high levels of statistical significance, it follows that the comparing variables analyses did not, either.

To enable trainers to understand the findings of our survey and tailor the training to particular categories, we were employing comparison variables (countries, age groups, etc.)

The study was done using an Excel pivot point spreadsheet to create graphics from straightforward data matrices. Then, the following variables were listed:

VARIABLES	EXAMPLES
Dichotomous	Participation in digital citizenship course: yes and no
Trichotomous	Living area: rural, urban (small) and urban (large)

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Multinomous	Country: Romania, Greece, Germany and Cyprus Age: 13 – 15, 16 – 19, 20 – 24 and 25 – 30 Status: school pupil, student, employee and NEET Learning style: concrete learning, reflective observation, abstract conceptualization and active experimentation

Additional factors were covered below, if necessary, because the aforementioned list of variables is not all-inclusive for the analytical procedure. The most notable analytical findings are shown here, along with pertinent remarks.

- Country distribution. It was anticipated that responses may depend on the national habitants, regarding the opportunities for professional life, digital citizenship, the use of devices, the course curriculum and its characteristics.
- Age interval (Q1). It was thought that age influences the existing experience with digital citizenship courses. Also, there are expected different preferences regarding the curriculum of digital citizenship courses: competences, motivation, approach, evaluation, time management and content.
- Status (Q3). It was anticipated that the occupation affects the existing number of participants in digital citizenship training as well as the competences of correspondents' fellows. Regarding the concept of the course, it is expected to affect the motivation and the course selection criteria.
- Living area (Q4). It was forecast that the zones have an impact on the level of digital competences.
- Participation in digital citizenship course (Q6). It was thought that there is a difference in the level of digital competences among the companions of people who participated in a digital citizenship course in comparison with those who did not.
- Learning style (Q9). It was anticipated that the learning styles influence the desired assessment methods and the time management for studying.

We ran a number of 30 analyses:

1.2.2.1. Respondents with fewer opportunities (Q5) by country

The figure below shows what kind of fewer opportunities are facing survey participants from partner countries. This is relevant for course managers and youth workers, because knowing the situations their target groups are facing may help them tailor their course delivery to specific target groups.

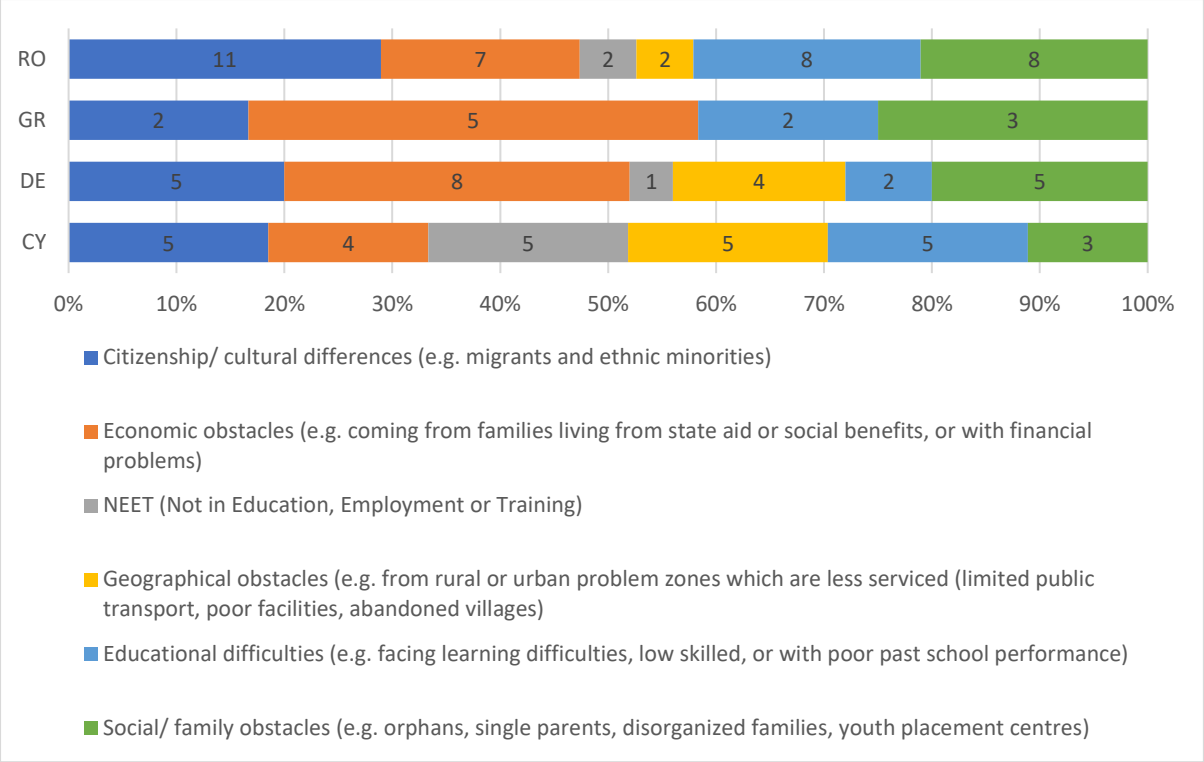

Figure 1.21 Respondents with fewer opportunities (Q5) by country. *Source: DIGCIT online survey*

The results indicate that in Romania most people with fewer opportunities are facing citizenship/ cultural differences. This is somewhat expected because TEAM4Excellence is based in Constanta, which is a multi-cultural and multi-ethnic county in Romania.

In Greece, most people are facing economic obstacles while in Germany are the least NEET respondents. Cyprus appears the most balanced country in terms of young people with fewer opportunities.

1.2.2.2. Digital citizenship courses (Q6) by country

The research team also considered it relevant to outline the proportion of people who previously participated in any digital citizenship training course in each project country.

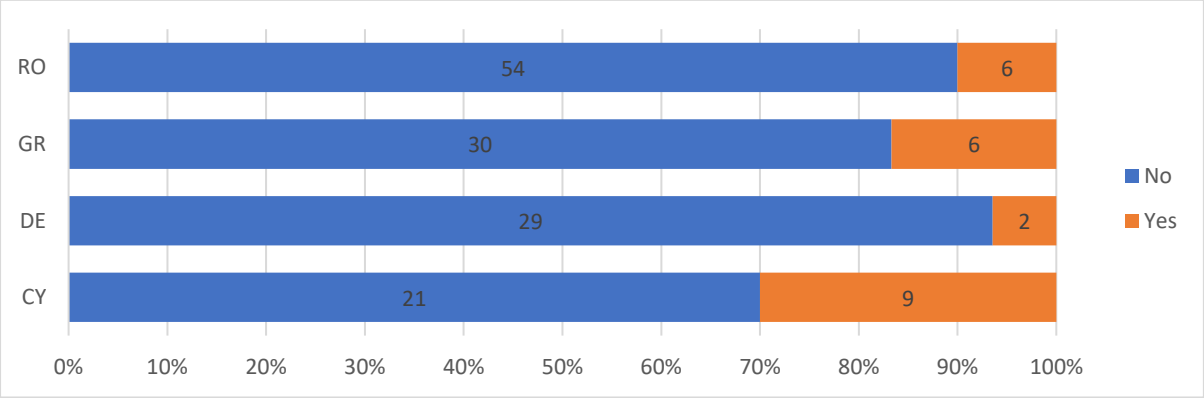

Figure 1.22 Digital citizenship courses (Q6) by country. *Source: DIGCIT online survey*

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The analysis placed Cyprus in the first place, followed by Greece, Romania and Germany.

1.2.2.3. Level of digital citizenship competences (Q7) by country

The figure below shows the perceived digital citizenship competence of young people in the four participating countries.

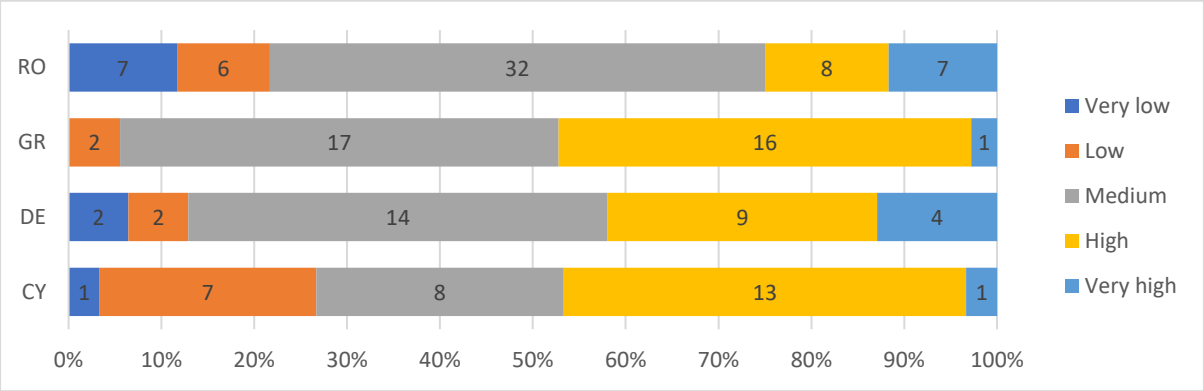

Figure 1.23 Level of digital citizenship competences (Q7) by country. *Source: DIGCIT online survey*

The results indicate the highest level of confidence in Cyprus and Greece, while in Romania just 75% of respondents answered high or very high.

1.2.2.4. Devices used (Q8) by country

For course designers, teachers, trainers and youth workers it may be interesting what devices are young people using in their countries.

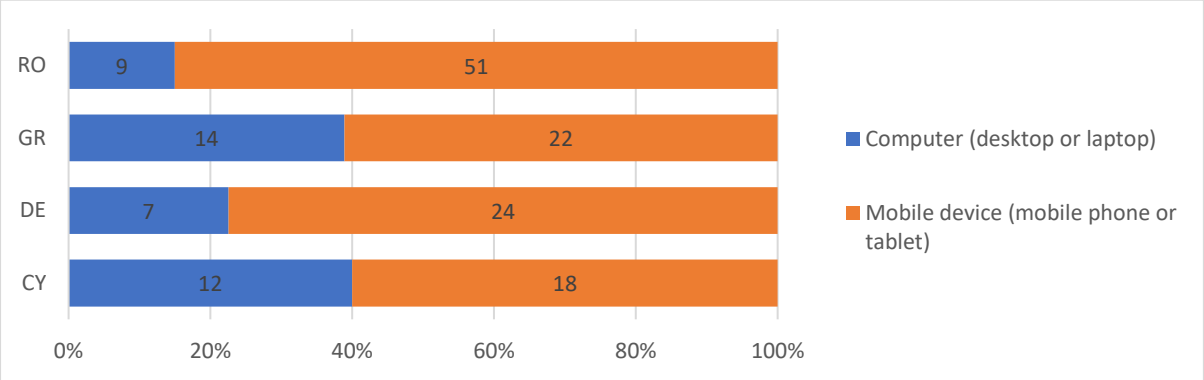

Figure 1.24 Devices used (Q8) by country. *Source: DIGCIT online survey*

The comparing variables analysis shows that Romanians are the greatest adopters of mobile devices. While around 20% of survey participants from Romania and Germany completed the survey from mobile devices, in Greece and Cyprus the rate was about 40%.

This may be further investigated with the age distribution of participants across participating countries. Regardless of country of origin, it is very evident that most people are using mobile devices.

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1.2.2.5. Learning styles (Q9) by country

When delivering courses, it is important to know the learning styles of participants. This becomes even more important for a MOOC, where the course designers and facilitators do not have a face-to-face contact with course attendants.

It is worth mentioning that this question indicates just the *perceived* learning style. For more comprehensive insights on the actual learning style, course designers and youth workers may refer to the work of (Kolb, 1984), (Honey & Mumford, 1982).

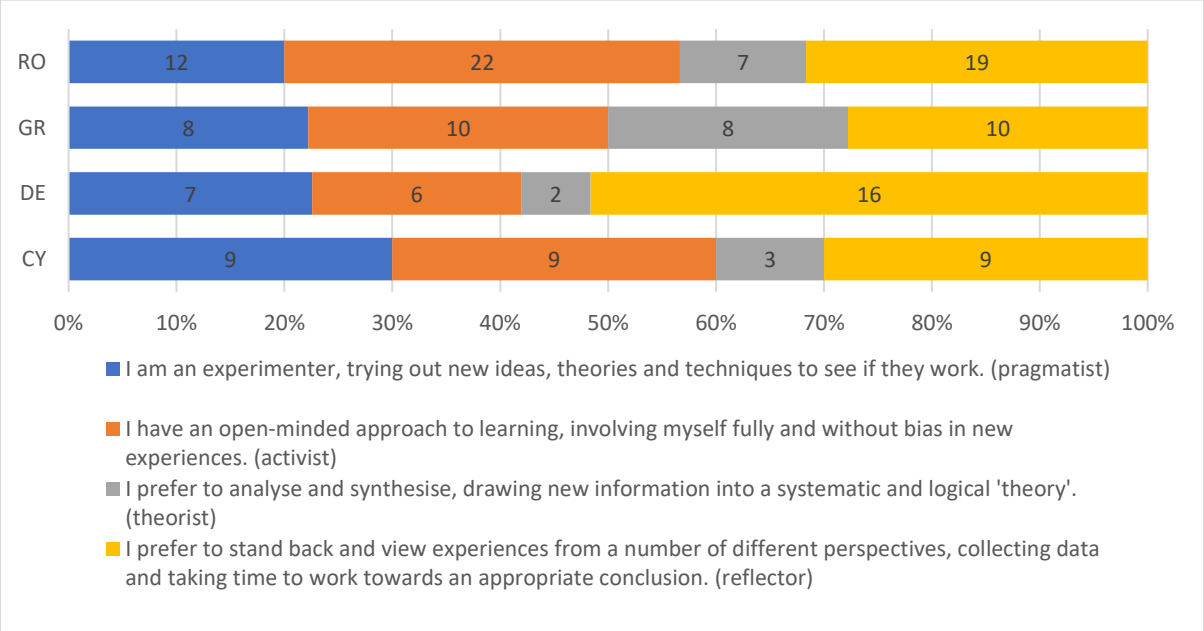

Figure 1.25 Learning styles (Q9) by country. *Source: DIGCIT online survey*

The analysis points out that most respondents in Romania are activists, in Greece are activists and theorists, in Germany reflectors while in Cyprus there is a mix of pragmatists, activists and reflectors. The least represented category is the theorists.

1.2.2.6. Assessment method (Q10) by country

For the project course designers, it was interesting to analyse the respondents' preferences in terms of the course assessment method.

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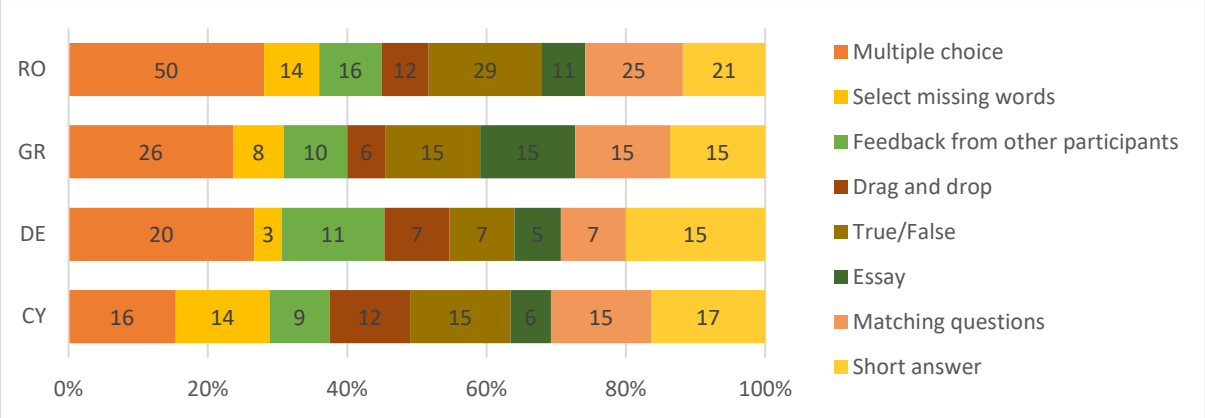

Figure 1.26 Assessment method (Q10) by country. *Source: DIGCIT online survey*

While in Cyprus there is a balanced mix of preferences, in the other 3 countries multiple choice questions were preferred the most. The Romanian participants were the greatest adopters of multiple-choice questions.

1.2.2.7. Assessment approach (Q11) by country

From the simple count analyses, it was evident that about half of the survey population opted for assessment during and on completion of the course, while the other half opted for assessment only at the end of the course module.

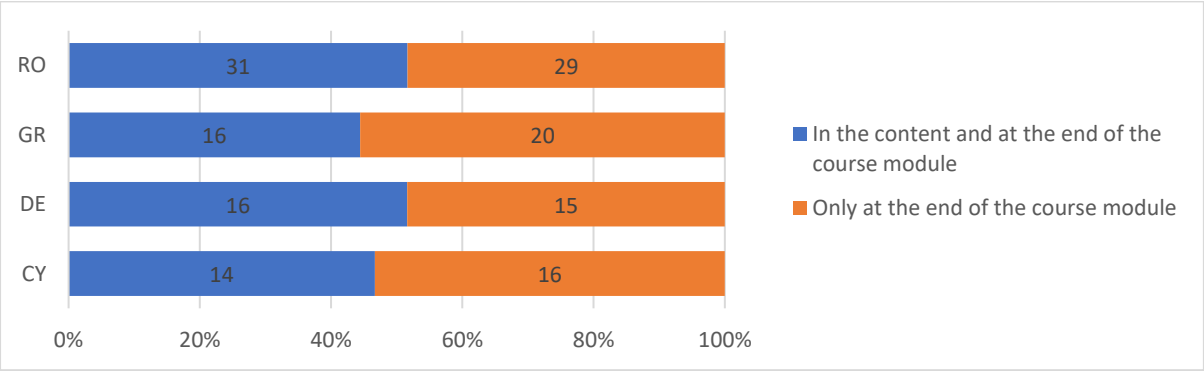

Figure 1.27 Assessment approach (Q11) by country. *Source: DIGCIT online survey*

The country analysis did not indicate much difference across countries.

1.2.2.8. Duration of course sessions (Q13) by country

The research team investigated whether there are any significant differences across countries when it comes to course duration.

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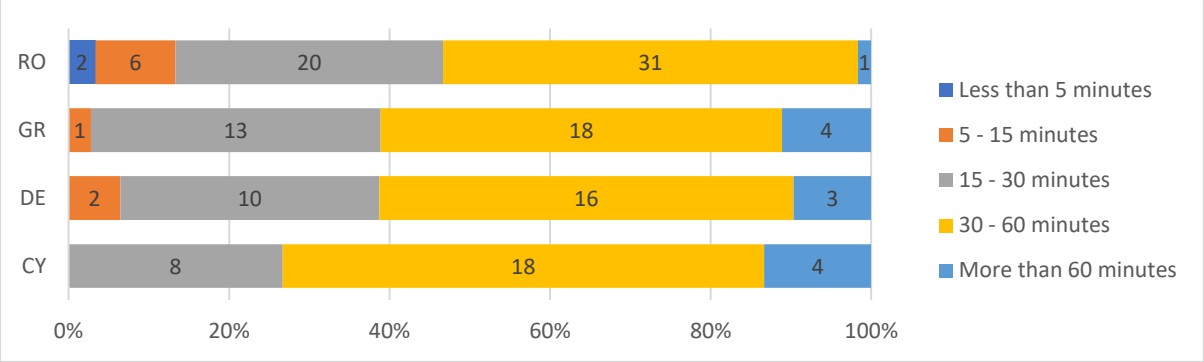

Figure 1.28 Duration of course sessions (Q13) by country. *Source: DIGCIT online survey*

While the preferences are similar in general, it can be concluded that, compared to other countries, more Romanian participants prefer shorter courses.

1.2.2.9. Motivation (Q14) by country

The motivation of young people from various countries to start an online course may also be of interest, particularly to help youth workers to pass on a message to their target groups.

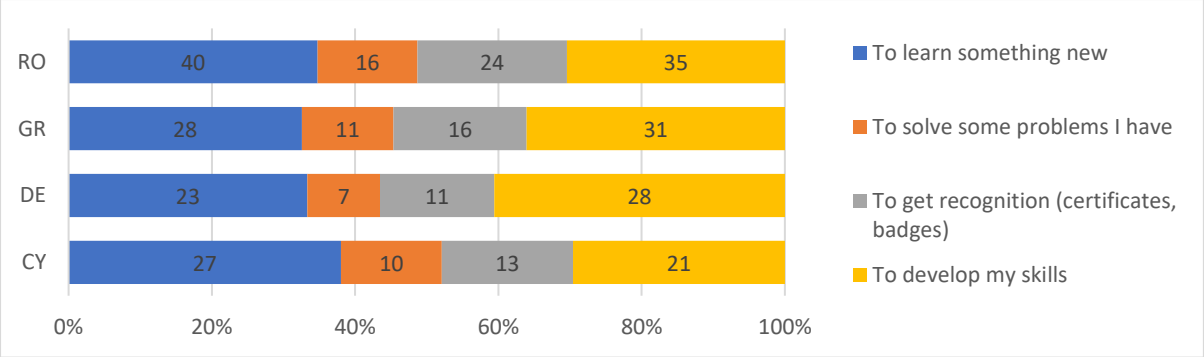

Figure 1.29 Motivation (Q14) by country. *Source: DIGCIT online survey*

While in Greece and Germany the most important motivation is skill development, in Romania and Cyprus the most important motivator is learning something new. Interestingly, getting recognition came in last in all 4 participating countries. Nevertheless, a course need not use only one motivator, but a combination of two, three and even four.

1.2.2.10. Course selection criteria (Q15) by country

The research team was interested to understand how young people choose whether to join or not an online course and if there is a difference across countries.

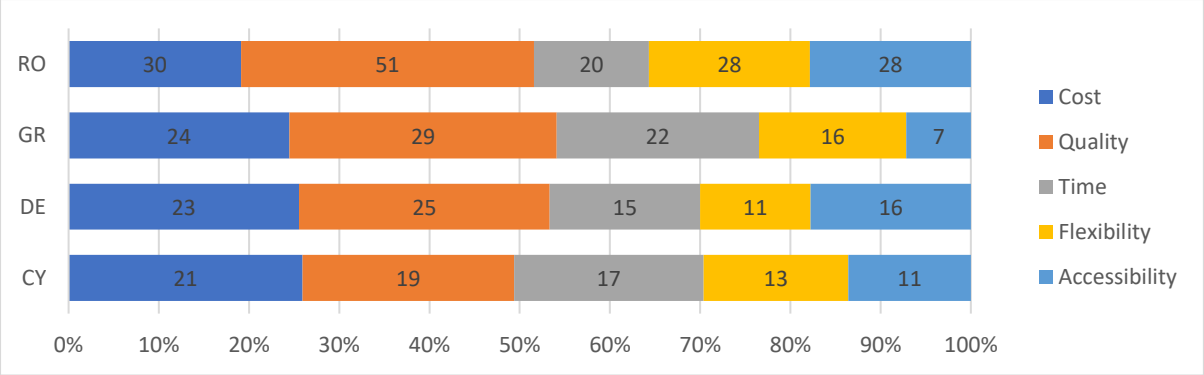

Figure 1.30 Course selection criteria (Q15) by country. *Source: DIGCIT online survey*

For respondents from Cyprus, the most important factor was the cost. In the other three countries, the quality came in first. However, there is no significant difference across the four countries.

1.2.2.11. Educational materials (Q16) by country

The research team considered it relevant to look into what educational materials are preferred by young people in the four participating countries.

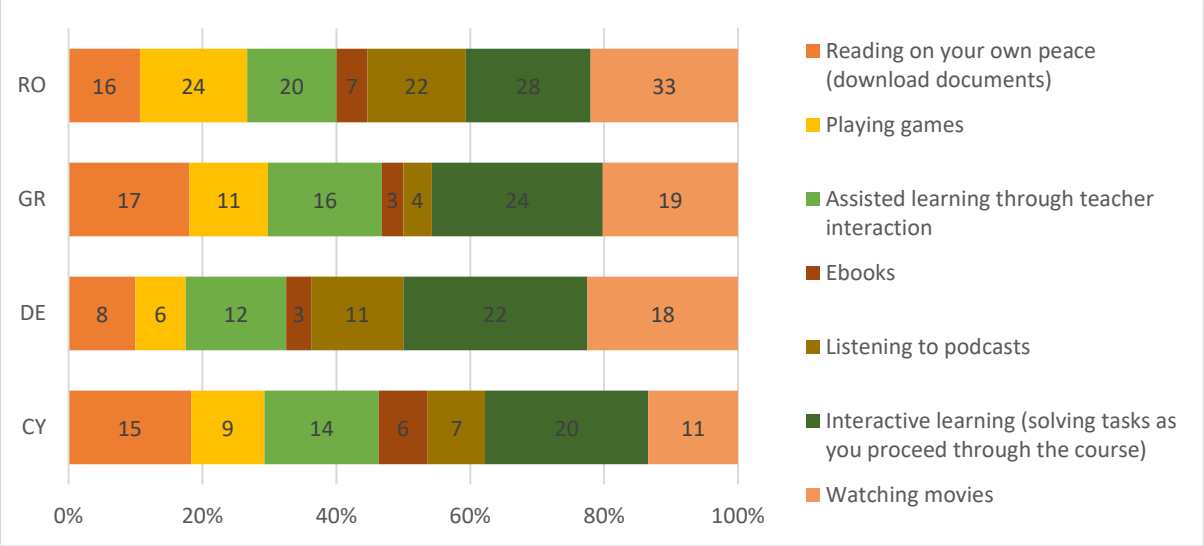

Figure 1.31 Educational materials (Q16) by country. *Source: DIGCIT online survey*

While many Romanian participants appear to prefer downloading documents and reading at their own pace, the interactive learning option was the most selected by participants from Greece, Germany and Cyprus. Reading e-books is the least popular option in all countries.

1.2.2.12. Course added value (Q17) by country

The research team then investigated the perceived course added value across countries.

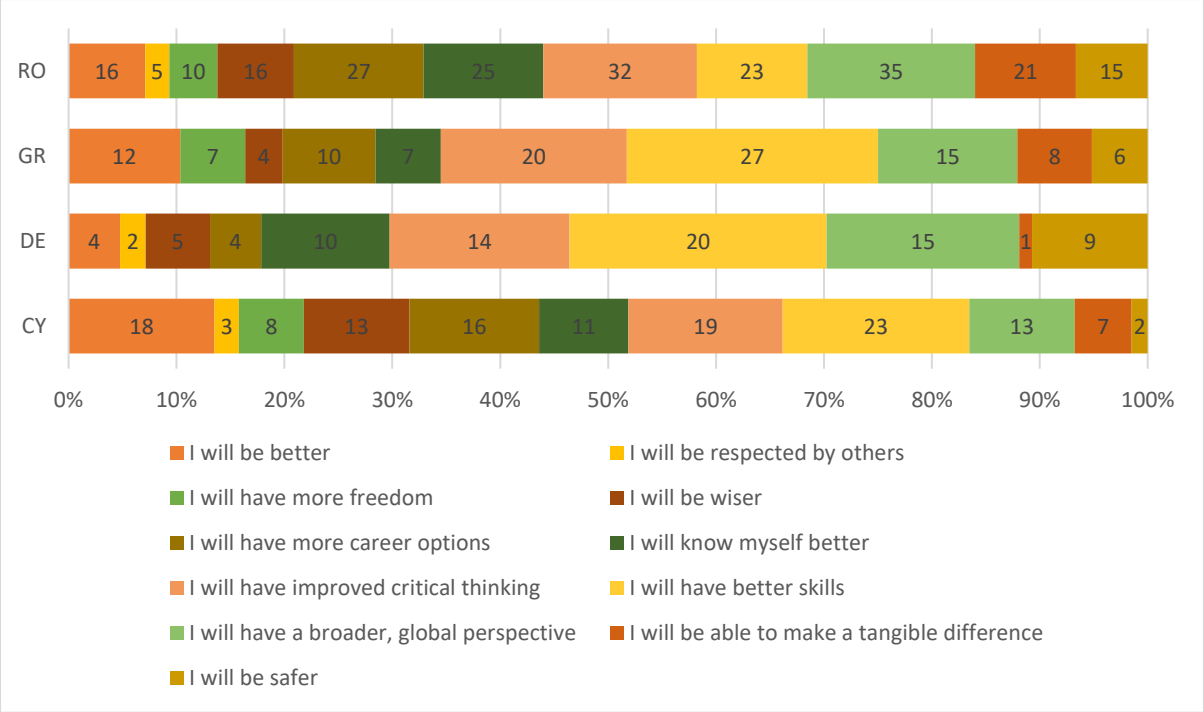

Figure 1.32 Course added value (Q17) by country. *Source: DIGCIT online survey*

While there are some differences across countries, in general, the "I will have improved critical thinking", "I will have better skills" "I will have a broader, global perspective" options are well represented in all countries.

1.2.2.13. Digital citizenship training (Q6) by age (Q1)

The research team also considered it relevant to outline the digital citizenship training received by participants from different age groups.

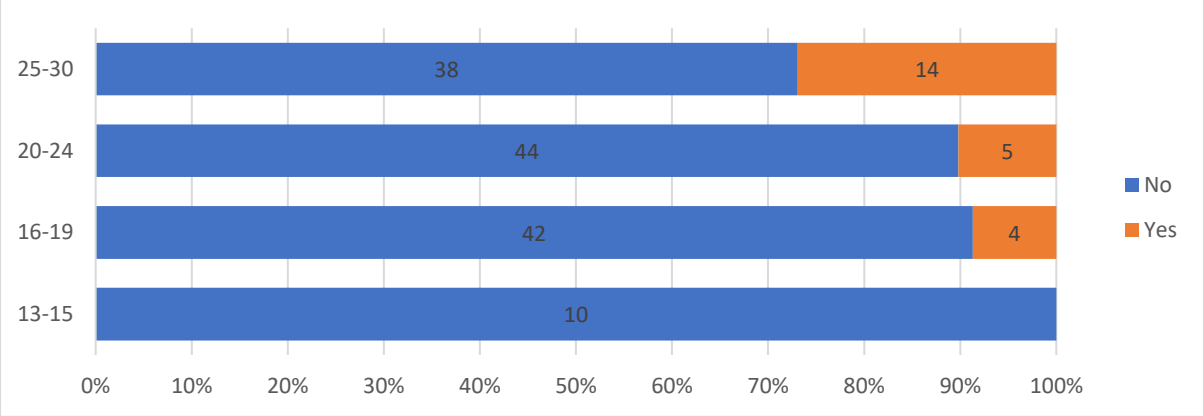

Figure 1.33 Digital citizenship training (Q6) by age (Q1). *Source: DIGCIT online survey*

Somewhat in line with expectations, participants of older age received more digital citizenship-related training, compared to younger ones. However, relatively small numbers of people received digital citizenship training; for example, none of the 13–15-years-old received such training.

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1.2.2.14. Digital citizenship competences (Q7) by age (Q1)

For our team of course designers, teachers, trainers and youth workers, it was interesting to look into the perceived digital citizenship competences of various age groups.

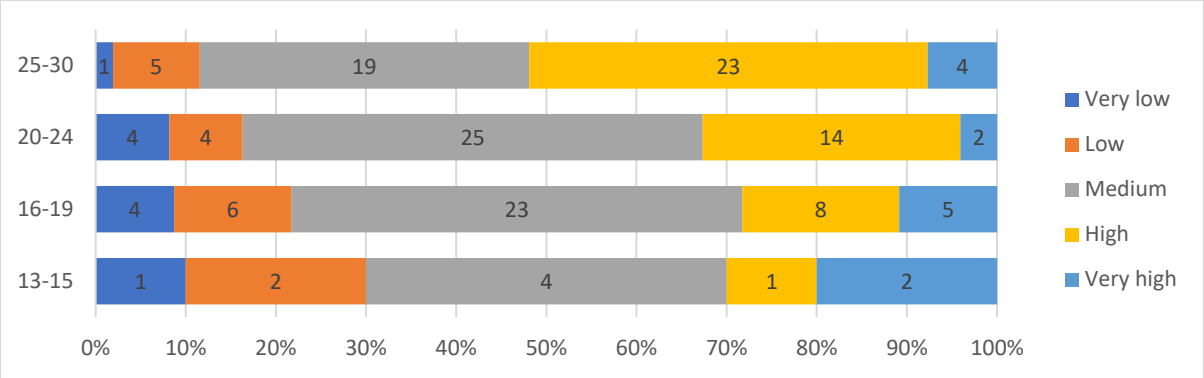

Figure 1.34 Digital citizenship competences (Q7) by age (Q1). *Source: DIGCIT online survey*

From the data collected, the participants in the 25-30 years old interval have the highest level of relevant competences. The results for the other three age intervals are somewhat similar in percentages. This is of importance when determining the degree of course difficulty and complexity.

1.2.2.15. Assessment method (Q10) by age (Q1)

When designing MOOCs, it is important to know what assessment methods various age groups would prefer.

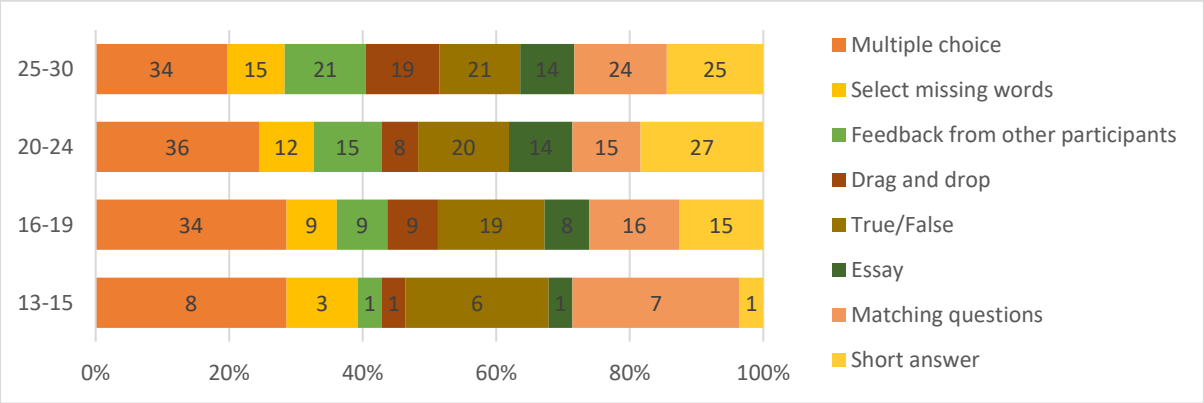

Figure 1.35 Assessment method (Q10) by age (Q1). *Source: DIGCIT online survey*

The multiple-choice questions received the most votes in all target groups, but there are some significant differences among age groups when it comes to other options given. Fr example, the youngest are more willing to match questions, while not being very keen on feedback from other participants, writing essays or providing short answers.

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1.2.2.16. Assessment approach (Q11) by age (Q1)

In addition to learning if assessment quizzes during and at the end of the online training course may be an acceptable solution for the course, the researchers looked into the preferences of different age target groups.

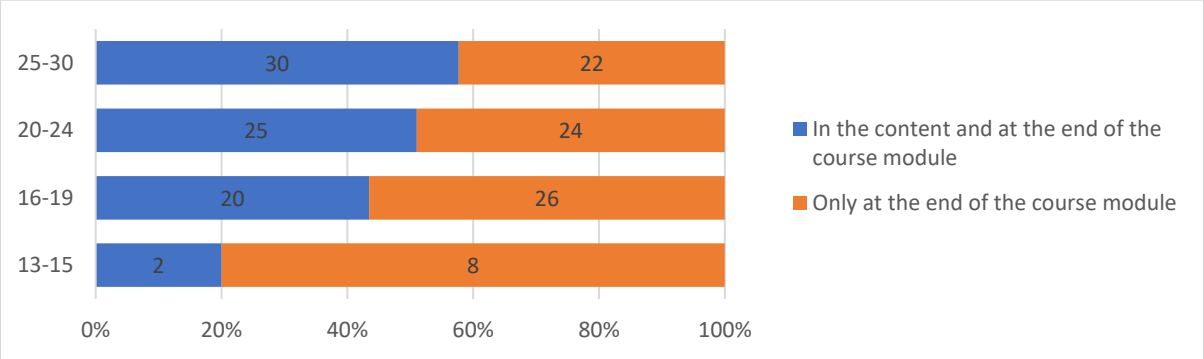

Figure 1.36 Assessment approach (Q11) by age (Q1). *Source: DIGCIT online survey*

The results indicate that the youngest would prefer the assessments only at the end of course modules. Meanwhile, the acceptance of assessments integrated into the course content consistently increases with age, to almost 60% for participants aged 25-30.

1.2.2.17. Weekly study time (Q12) by age (Q1)

The simple counts analysis indicated that most respondents chose shorter courses, but is this consistent for all age target groups?

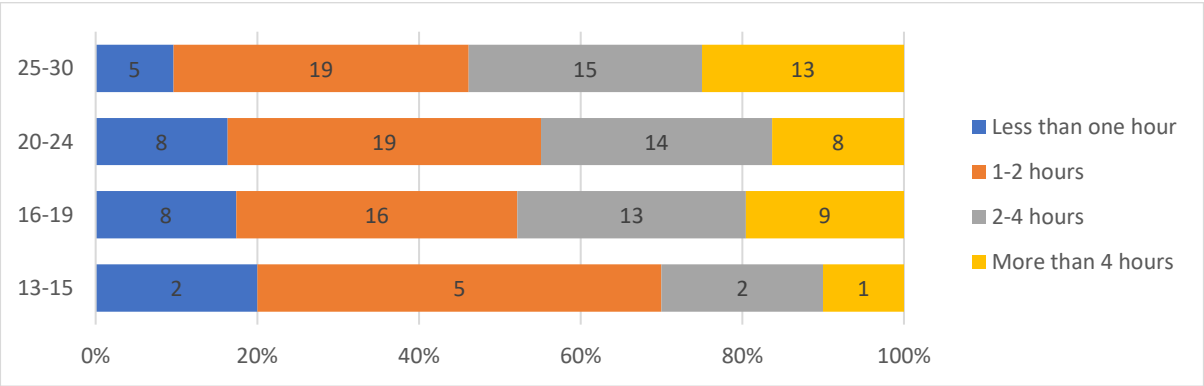

Figure 1.37 Weekly study time (Q12) by age (Q1). *Source: DIGCIT online survey*

The analysis with comparing variables indicates that older people would study longer times during each week. Therefore, digital citizenship courses delivered to younger people may consider longer course periods or less content.

1.2.2.18. Duration of course sessions (Q13) by age (Q1)

During the course design phase, it is important to know how much time young people are willing to spend at a time. Equally, it is relevant to differentiate between different age groups.

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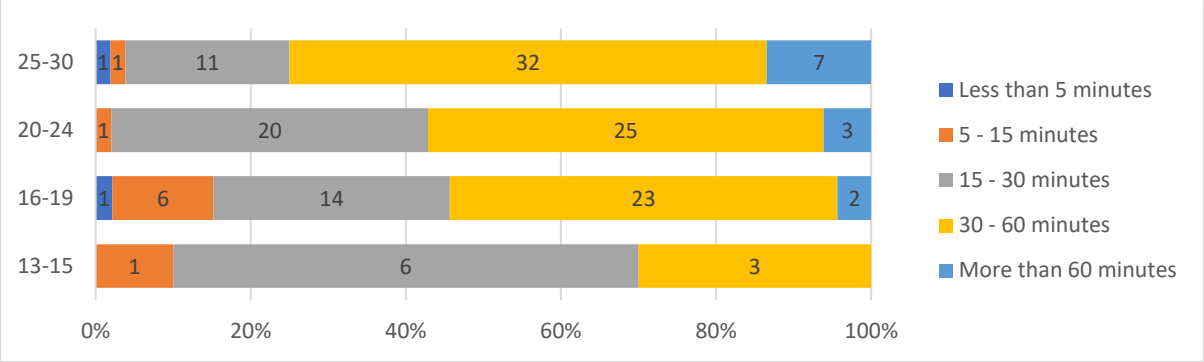

Figure 1.38 Duration of course sessions (Q13) by age (Q1). *Source: DIGCIT online survey*

The data collected and compared shows that older participants would take longer course sessions compared to the youngest. In fact, none of the 13-15 years old respondents selected the "more than 60 minutes" option.

1.2.2.19. Motivation (Q14) by age (Q1)

The research team considered it relevant to look into the motivation of respondents from different age groups to participate in digital citizenship courses.

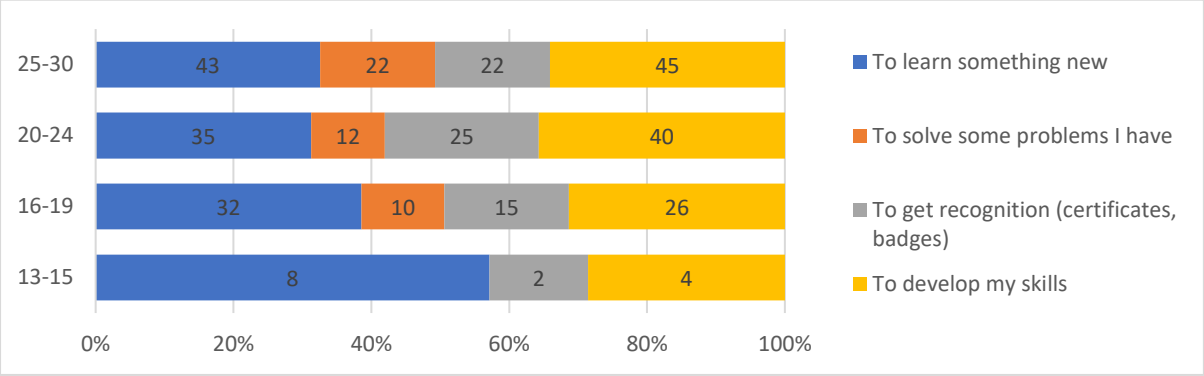

Figure 1.39 Motivation (Q14) by age (Q1). *Source: DIGCIT online survey*

In this regard, data indicates that younger people are more interested "to learn something new", while older youth want "to develop their skills". None of the youngest wanted to "solve problems" that they may have.

1.2.2.20. Course selection criteria (Q15) by age (Q1)

When designing MOOCs, it is important to know how participants select the online courses they attend. At the same time, it is relevant to know whether participants in different age target groups have different selection criteria in mind.

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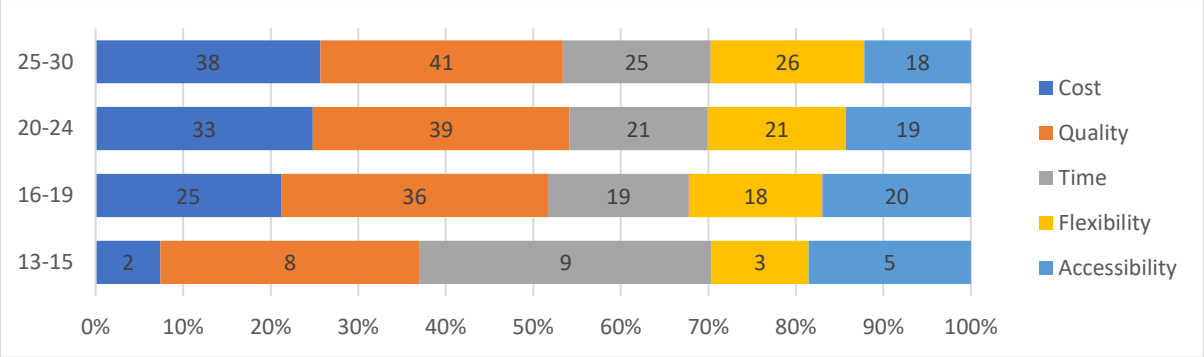

Figure 1.40 Course selection criteria (Q15) by age (Q1). *Source: DIGCIT online survey*

While most respondents were interested in the quality and cost of courses, younger respondents were not concerned about costs. This is somewhat expected since the younger people are course users and influencers in the course acquisition process, rather than decision-makers who are usually parents (those paying for courses). Nevertheless, under the EU project co-financing, our consortium is providing course materials for free. Youth workers may pay attention to these cost preferences when using the DIGCIT courses to deliver them in their communities.

1.2.2.21. Educational materials (Q16) by age (Q1)

From the simple counts analysis, the research team learned that young people prefer interactive learning and movies as educational materials. While providing digital citizenship education to youngsters, it is always of interest to know what kind of educational materials youngsters of different ages prefer.

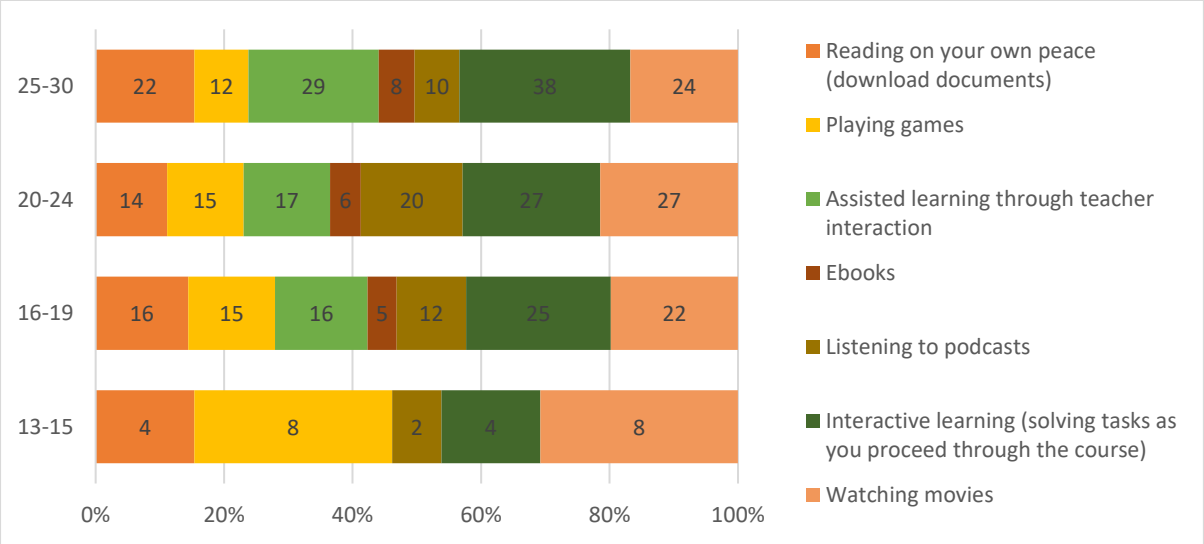

Figure 1.41 Educational materials (Q16) by age (Q1). *Source: DIGCIT online survey*

The data analysis with comparable variables suggests similar preferences for 16+ young people, with the most voted option being interactive learning. In comparison, younger respondents prefer playing games.

1.2.2.22. Course added value (Q17) by age (Q1)

The perceived benefits of the digital citizenship course are somewhat similarly distributed by age. Better skills, improved critical thinking, a global perspective, career options, self-awareness and being better are well represented across all age intervals. The figure below refers.

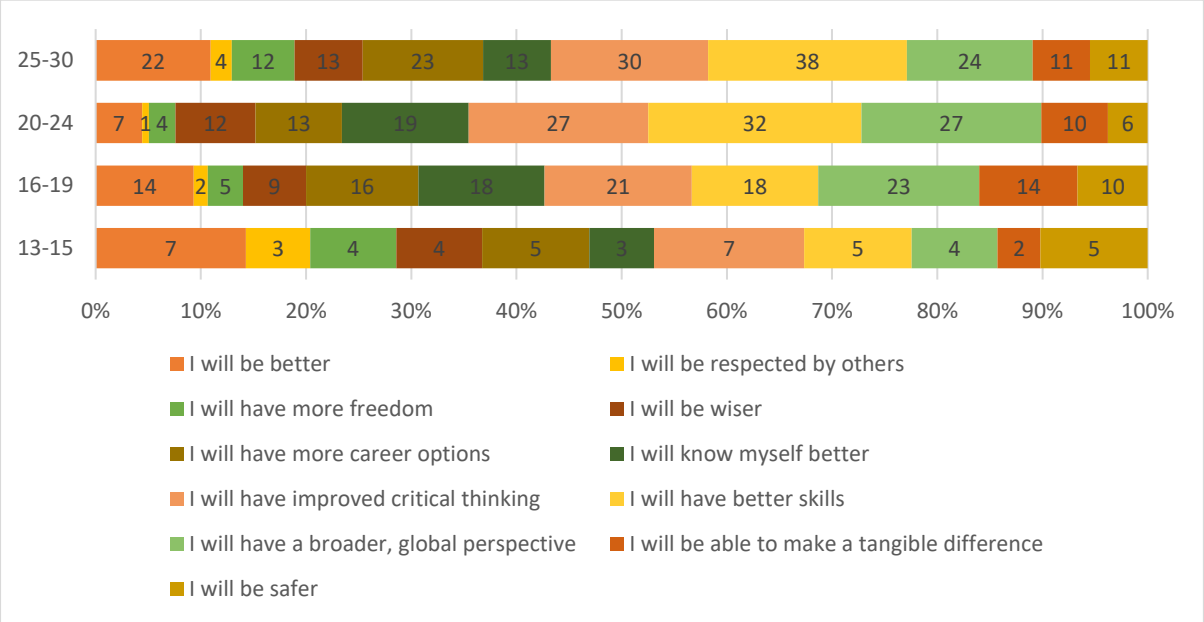

Figure 1.42 Course added value (Q17) by age (Q1). *Source: DIGCIT online survey*

1.2.2.23. Digital citizenship courses (Q6) by education and employment (Q3)

The research team also considered it relevant to outline the digital citizenship training received by participants in different study/employment situations.

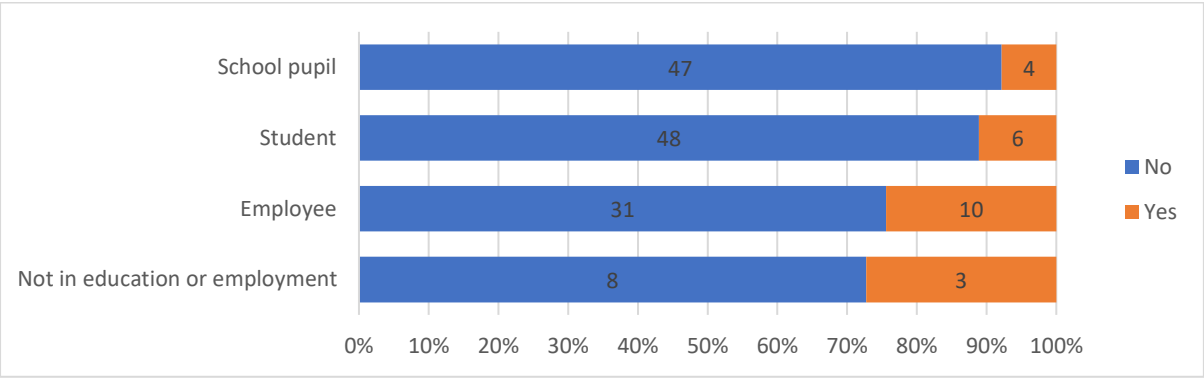

Figure 1.43 Digital citizenship courses (Q6) by education and employment (Q3). *Source: DIGCIT online survey*

Interestingly, school people received less topical training, while the forefront runners were those not in education or employment. This is somewhat expected since digital citizenship skills are transversal skills useful for employers and employees at the same time.

1.2.2.24. Level of digital citizenship competences (Q7) by education and employment (Q3)

For our team of course designers, teachers, trainers and youth workers, it was interesting to look into the perceived digital citizenship competences of people with different education/employment statuses.

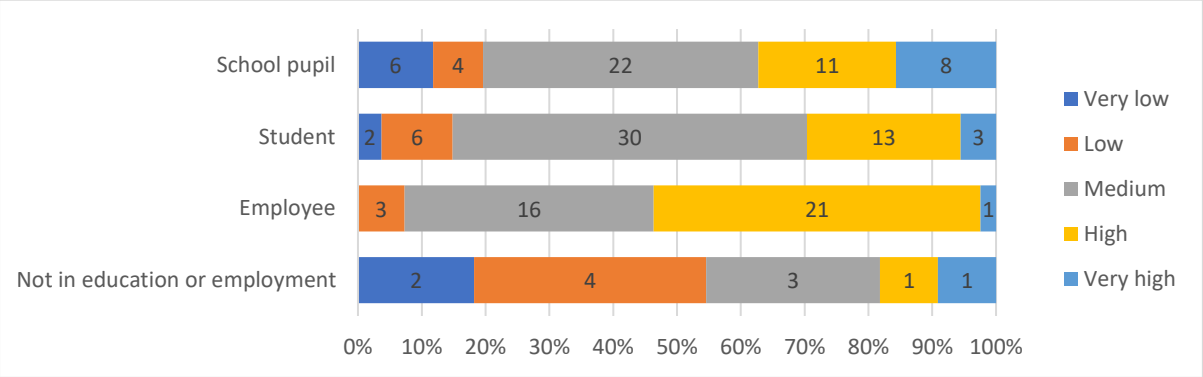

Figure 1.44 Level of digital citizenship competences (Q7) by education and employment (Q3). *Source: DIGCIT online survey*

From the data collected, those under employment are more confident in their digital citizenship competences. At the other end of the spectrum, those not in education and employment are the least confident in their abilities. This is of importance when determining the degree of course difficulty and complexity.

1.2.2.25. Motivation (Q14) by education and employment (Q3)

The motivation of young people from various backgrounds to start an online course could be also relevant in order to assist youth workers to promote the digital citizenship course to their target groups.

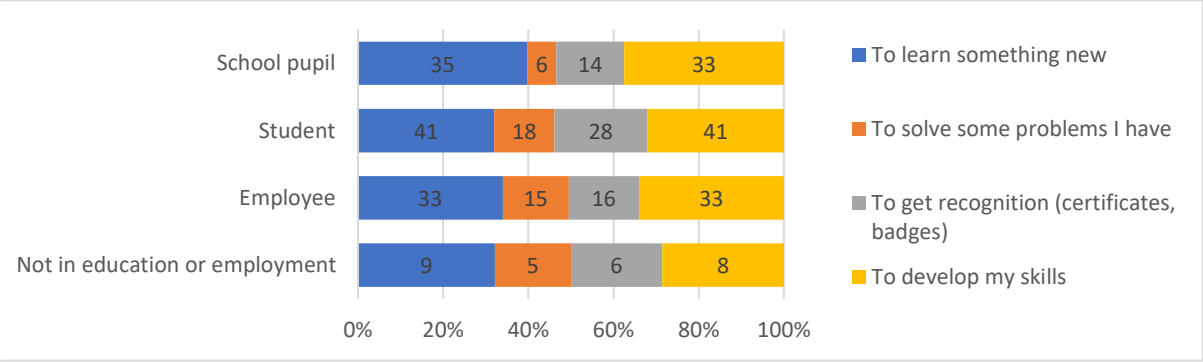

Figure 1.45 Motivation (Q14) by education and employment (Q3). *Source: DIGCIT online survey*

The comparative analysis shows similar results across education/employment categories, with learning something new and developing skills being the strongest motivators.

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1.2.2.26. Course selection criteria (Q15) by education and employment (Q3)

The research team was interested to understand how young people with different education/ employment statuses choose to join online digital citizenship courses.

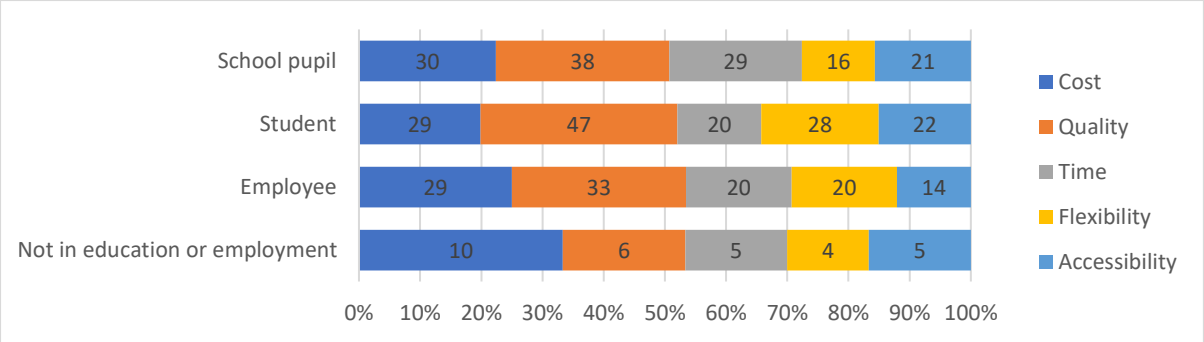

Figure 1.46 Course selection criteria (Q15) by education and employment (Q3). *Source: DIGCIT online survey*

For school pupils, students and employees, the most valued criterium is the quality of the course. However, those not in education or employment mentioned cost as a first choice.

1.2.2.27. Digital citizenship competences (Q7) by living area (Q4)

The figure below shows the perceived digital citizenship competence of young people living in different areas (rural, small cities and large cities).

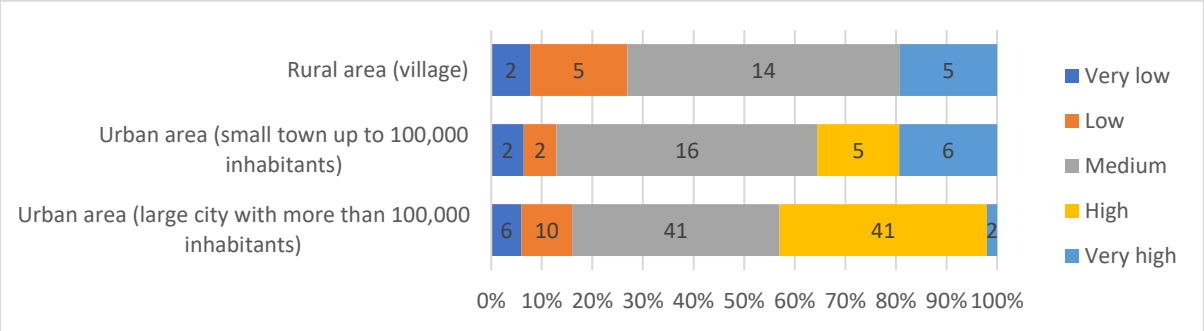

Figure 1.47 Digital citizenship competences (Q7) by living area (Q4). *Source: DIGCIT online survey*

The comparative analysis indicates that a larger proportion of young people in large cities consider that they have high and very high skills, compared to small towns and rural areas. Again, this may be an indication for course providers on how to adjust the course delivery to people with different backgrounds.

1.2.2.28. Digital citizenship competences (Q7) and digital citizenship courses (Q6)

For our team of course designers, teachers, trainers and youth workers, it was relevant to look into the perceived digital citizenship competences of people who already participated in digital citizenship-related courses, compared to those who did not have the opportunity to participate.

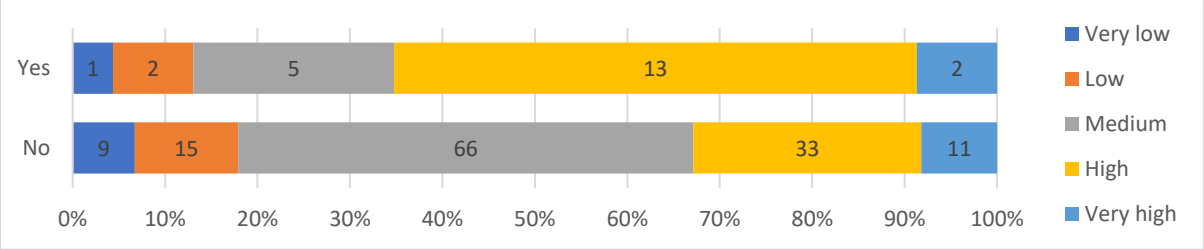

Figure 1.48 Digital citizenship competences (Q7) and digital citizenship courses (Q6). *Source: DIGCIT online survey*

In line with expectations, those young people who have previously been in digital citizenship training are more confident in their levels of confidence.

1.2.2.29. Learning styles (Q9) and assessment methods (Q10)

When designing MOOCs, it is important to know what assessment methods prefer young people with different learning styles.

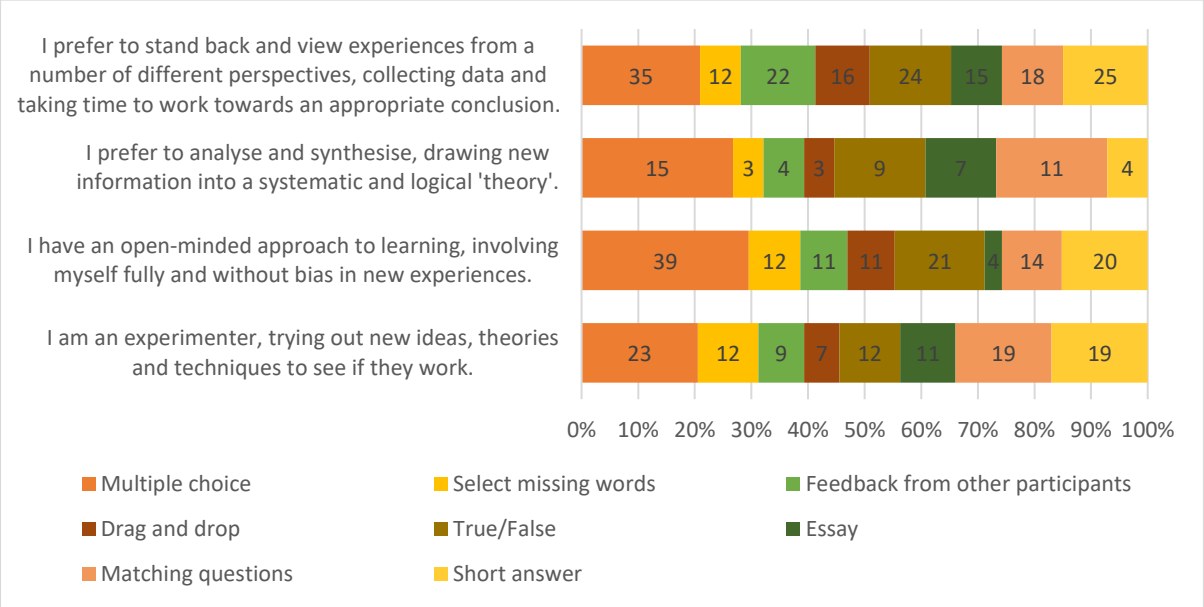

Figure 1.49 Learning styles (Q9) and assessment methods (Q10). *Source: DIGCIT online survey*

Based on the comparative analysis, the research team concluded that the multiple-choice questions were the most appreciated assessment method, irrespective of the learning styles.

1.2.2.30. Learning styles (Q9) and study time (Q12)

When delivering courses, it is important to know how much weekly time participants are willing to dedicate to the digital citizenship course. At the same time, it is also relevant to put this into context and map this across the learning styles of participants.

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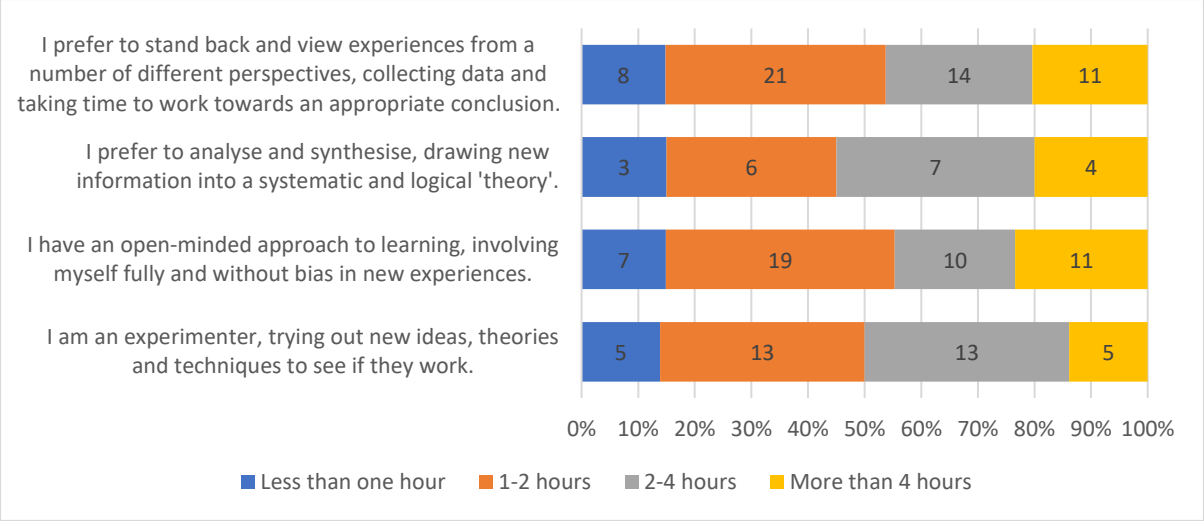

Figure 1.50 Learning styles (Q9) and study time (Q12). *Source: DIGCIT online survey*

The survey data collected does not substantiate significant differences in weekly study times across the four learning styles (activists, theorists, reflectors and pragmatists).

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1.3. Interviews with youth workers

The purpose of this document is to guide the partners of the DIGCIT project in the development, deployment and analysis of interviews for youth workers' perspectives on digital citizenship MOOC education. The aim is to address youth workers' awareness of MOOCs and their willingness for various teaching styles, educational methods, and youth workers' perspectives about learners' views about teaching methods and assessments.

This document provides readers with the tools, methodologies, templates and reporting instructions for the delivery of interviews with youth workers. Therefore, it is transferable to other research contexts.

1.3.1. Interview methodology

There is a common view that qualitative data is prone to be less reliable, harder to aggregate, to compare longitudinally or to use for benchmarking and that its interpretation has an inherent bias. Yet expert insights can be more useful for the project manager and the decision-making bodies of the partnership rather than raw quantitative data.

As (Mason, 2002) suggests, in qualitative research, it is more accurate to refer to the generation of data rather than the collection of data, since most qualitative perspectives are rejecting the role of the researcher as a neutral collector of information about the social world. Data sources in qualitative research are people, organizations, texts, settings, material or visual objects and any kind of people interaction. The methods most commonly used are qualitative interviewing, participant observation and the use of visual methods and documents. Depending on the research design of a study, the different sources are accessed by different methods.

Interviewing is one of the major methods used in qualitative research. Its main purpose is to offer insight into different people's opinions, beliefs, attitudes and experiences by conducting an interactive dialogue (Mason, 2002). The overall rationale of the interviewing method is to provide rich and detailed answers on any research topic. Moreover, during the course of an interview, new issues and new ideas may emerge that could further facilitate the analysis of any topic in question. In order to help these new issues and ideas emerge, interviews in qualitative research tend to be less structured. During any dialogue, interest focuses more on the interviewee's point of view and less on the conduction of a clear and scheduled interview that reflects the topics that the researcher needs to cover. This flexibility yields in turn wider aspects of the topics in question as well as unexpected themes that can, however, be as important as the initial researcher's concerns.

There are four main types of interviews in social research. According to (May, 2001) knowledge can be produced by:

- structured,
- semi-structured,
- unstructured or focused,
- and group-focus interviews.

This project adopted the research method of semi-structured interviews. Semi-structured interviews follow a predefined thematic guide, but can easily depart from it when there is a need for clarification or further interest in the interpretation of any stated opinions. This flexibility places an emphasis on

the particular issues and topics that the interviewee considers important and gives insight into relevant areas not addressed by the investigator.

Each national partner is expected to undertake the following actions in the context of this activity:

Step 1: Translation of the Interview Questions

Step 2: Conducting Interviews

Step 3: Coding, Grouping and Comparing the Results

Step 4: The Interviews Report

1.3.1.1. Categories of respondents and sample size

The current research seeks to identify what could encourage or hinder the adoption of MOOCs by youth workers. But who are the youth workers?

Our preliminary literature review shows that the interviewees are people who work directly with young people or provide non-formal education to youth. Because the definition of youth workers and their realities in terms of education, employment and job descriptions are different from country to country, the research team felt useful to provide some examples. As such, the interviewees may be youth educators, trainers, psychologists, counsellors, therapists, volunteers, local/regional agency employees or youth social workers.

The numbers of interviews were already established during the planning phase of the DIGCIT project. The interviews were divided among the project partners, who carried out interviews in national contexts. The interviews are intended to complement each other, rather than overlap. Because of that, these interviews are considered sufficient for providing sufficient quality and quantity of primary data.

These may be members of the partner organizations, delegates from associate partners or other organizations. In selecting the interview participants, project partners shall consider gender equality, equal opportunities and relevance in terms of knowledge, experience, skills and line of youth work.

A total of eight (8) interviews are expected to take place in the context of this activity, two (2) in each national context in Romania, Greece, Germany and Cyprus. Interviewees may be members of the partner organizations, delegates from associate partners or other organizations. In selecting the interview participants, project partners shall consider gender equality, equal opportunities and relevance in terms of knowledge, experience, skills and line of youth work.

1.3.1.2. Participant Information Guide

A range of suitable interviewees is considered upon delivery of the interview methodology with questions. The potential interviewees are initially contacted directly or via email or phone. It is crucial to provide interviewees with all the required information relating to their participation in the interview process. Below we have developed a sample that could be translated and employed in each of the four national settings. This is comprised of:

a) an invitation paragraphs

b) a “purpose of the study” paragraph
c) reasoning related to why someone has been chosen to take part in the interview
d) a “voluntary/consensual basis of participation” paragraph
e) a short description of the process of the interview
f) any potential foreseeable risks/harm that may occur
g) any potential benefits
h) data privacy statements
i) the confidentiality clause
j) the expected publication of the results/anonymity clause
k) the problem-solving procedures

A sample information sheet in English is included at Appendix 1 and may be modified and translated.

During the interview process, confidentiality and anonymity are ensured by anonymizing the name of the interviewee and coding it with initials. For the same reason, the data will be collected by note-taking, without video/audio recordings.

1.3.1.3. Interview consent

Upon completing the contacting process, the interviewers require the interviewees’ confirmation of participation and agreement with the associated arrangements. This is done by asking participants to fill in the Interview Consent Form (Appendix 2). The consent form may be prepared as a word document, in Google Forms or printed version. The interviews are then scheduled at the earliest convenient opportunity.

1.3.1.4. Interview questions

The nature of the research requires rather non-standardized interviews (Healey, 1991). However, (Robson, 2002) recommends participant discussions rather than informant interviews, because explanatory interviews are best directly (Center for Human Resource Development, 2021) led by the interviewer.

For that reason, the research methodology envisages semi-structured interviews, with a key set of themes and a range of guiding questions relevant to those themes being formulated.

The main interview themes draw from the preliminary literature review and include:

- Background of interviewees and reasons to become a youth worker
- Youth work experiences
- Awareness of the MOOC concept
- The role of MOOCs in the professional development of youth workers
- How to open up people to MOOCs
- Potential barriers to accessing MOOCs
- Standardization vs customization in MOOCs

The themes for the semi-structured interviews aim at allowing for asking both descriptive and explanatory questions during the interview. Based on the chosen themes, a set of seven complex and open-ended questions were designed to guide each interviewee:

1. Why did you decide to become a youth worker?
2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?
3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCs?
4. How do you think MOOCs can help you with your professional development?
5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?
6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to the same?
7. Please comment on the following statement: "Online education is a one-size-fits-all endeavour. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is."
   New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/

1.3.1.5. Coding of interviews

Codes are the smallest piece of text conveying the same context (Christians & Carey, 1989). Codes can be a letter, a phrase, or paragraph and the researcher is responsible for choosing the types of their codes and sticking to the accuracy of their data choices.

Coding Method

There're two types of coding methods, deductive and inductive.

Deductive coding is the coding method wherein a researcher has developed a codebook as a reference for guidance through the coding process. The codebook will be developed before the data collection starts, usually in the process of researching the existing field. Usually, if a researcher has a general direction in mind, it is easy to develop a rough codebook. Of course, the codebook changes as researchers code on, new codes will be added and categories re-organized. In the end, the codebook should reflect the structure of the data.

The inductive coding method is used when a researcher knows little about the research subject and conducts a heuristic or exploratory research. In this case, it is not necessary to have a codebook, since data is built from scratch.

The two types of coding methods have their own pros and cons, but the end result should be similar. The majority of your data should be coded and be able to form a narrative.

Initial Coding

During the initial coding, it is only important to read through the data and get familiar with it. During this stage, it is not important to develop sophisticated codes for the data but rather to have an idea of what the overall data looks like.

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Line-by-line Coding

During this stage, it is important to have a closer eye on the data. Codes should have more details.

Categorization

This is the stage at which similar codes are put into the same categories and reflect the analysis at its best. By analyzing and sorting the codes into categories, it is possible to detect consistent and overarching themes for the data. And within the themes, it is possible to tell the interviewees' stories.

Determination of themes

The categorization of codes reflects themes. The bigger categories are the overarching themes while the sub-categories support themes. This is where researchers can engage in storytelling from their data. The themes can tell the same story from different perspectives, or several different stories that connect with each other. With great narratives created from the themes, the messy qualitative data are now in a meaningful order.

Or as (Christians & Carey, 1989) suggest, "*In a nutshell, coding is the data analysis process that breaks the text down into the smallest units and reorganizes these units into relatable stories*".

1.3.2. Analysis of interviews

The objective of this research is to explore the views and perceptions of youth workers of the international driven need for the development of MOOCs at a local level and with the view to creating a model for the designation of MOOCs that will respond to the digital citizenship skills of youth workers and the needs of youth. Therefore, the key research question for the content analysis is "*Which are the obstacles that could encourage or hinder the adoption rate of MOOCs by youth workers?*".

According to the analytical procedure (Collis & Hussey, 2014), the following steps will be adhered to for the analysis of interviews:

1. Transcription of interviews
2. Coding of data by identifying key themes
3. Grouping of codes into major categories according to the themes
4. Recording of data
5. Interpretation of data and comparison of findings with existing literature

The transcription of the interviews is a process that requires a lot of time and effort. A good tip is the action of taking notes during the interviews (Patton, 2002). This can facilitate the formulation of an axis upon which the major themes will be added and thereafter the parts of the interviews will be filled in. Although time-consuming, the transcription of interviews will quarantine the quality and authenticity of the data.

Although the use of computer-assisted qualitative data analysis software could speed up the processes of coding, grouping and comparing, it is preferred to conduct the analysis manually, since in that way the analysis of data will be a continuous process and in constant relationship with the data collection. The key themes will emerge by taking into consideration their high frequency and importance underlined by the interviewees. In the use of any quotations by the interviewees, these

should be classified according to assigned numbers so as to maintain the anonymity of the participants.

Since data is "build from scratch" and the aim of this intellectual output is exploratory this analysis adopts the inductive coding method, e.g., it seeks to find the educational level of youth workers about MOOCs.

The categorization of the codes reflected the key themes that are being analysed. The bigger categories are the overarching themes while the sub-categories are the supporting themes.

The major themes that are analysed are:

- The opinion of youth workers about the MOOCs
- The way in which the MOOCs can facilitate the development of services offered by youth workers

The supporting theme or subcategory is the framing of the youth workers' identity and characteristics.

1.3.3. Interview results

1.3.3.1. The framing of the youth workers' identity and characteristics:

Social education and a clear comprehension of the world around them constituted two of the major characteristics that shape the common identity of youth workers.

"Perhaps the main reason I decided to be a youth worker is that I enjoy challenges and youth is one of the most challenging areas. Another thing is that, as a youth worker, I have the opportunity to make a positive impact on young people and society in general. Over time, I have been involved with youth through Erasmus and eTwinning".

"I became more sensitive about a lot of issues. I started wondering whether I could actually do something in order to change things around me…Our organization is a place where young people communicate, offer and exchange ideas. Examples are the environmental programs. We give and take at the same time."

"Help, support, things not easily offered today by anyone. Our team's work is based on communication, dialogue, companionship and personal contact. We were giving and we were taking so much more back."

1.3.3.2. The opinion of youth workers about the MOOCs:

On the issues of familiarity with and use of MOOCs youth workers favoured their training in order to undertake the management and operational tasks of MOOCs in their organization. However, findings suggested also that changes within their organizations can also produce a sense of frustration, especially in cases where organizations want to keep close to their missions and activities and don't risk altering their goals in the pursuit of more members or resources.

"*All in all, MOOCs can help but not as much as face-to-face meetings/courses. MOOCs have a number of benefits such as cost and time savings; they require less space but may bring up technical difficulties. Some other problems include the lack of socialization and peer-to-peer exchanges. Also, these courses*

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require rescheduling schedules to adjust to individual learning. In my opinion, MOOCs are more suitable for skills training, rather than academic knowledge. It would be good for MOOCs to build upon strengths to overcome these challenges."

"*From my experience, I think teaching and learning online is more difficult than face to face. It is difficult to organize games, you cannot use board games which is an essential tool for any trainer, there are several challenges including the availability of devices and high-speed internet (many young people do not have a job and have no money to purchase devices). In the online courses I saw, there were only individual tasks and no group activities, this is a major setback*."

"…I'll give you an example of what I am talking about. While attending the online activities, I envisaged that at the end of the sessions and discussion the youngsters would decide how they could transform their knowledge into action. And the result was that: we did the activity with the map, discussed the use of the compass and then said goodbye. No action, no mobilization. As if we were watching a TV class…That's what is missing: social action and response to the practical needs of the contemporary young people."

1.3.3.3. The way in which the MOOCs can facilitate the development of services offered by youth workers

Certain barriers did not help the adoption of organizational learning techniques within the youth organizations, since impersonal relationships and limited communication during the lockdown period caused questioning, reaction and disappointment to young people.

"We forgot that we are a youth organization. We felt that by offering educational programs everything would be ok…And now during the lockdown, we wondered what went wrong…I believe that the problem concentrates on the following issue: we really don't know our target group. We are a youth organization that seeks to develop young people. Maybe if we recall who we are, maybe we will find out how to help our target group more efficiently."

"Our members are familiar with the technology. They have the knowledge and the resources. But it is up to us to design attractive programs. We have to have the know-how of this kind of educational communication."

"*MOOCs are a great way to learn and improve myself whenever and wherever I want. Especially, now in the pandemic times, it is so crucial to find solutions that technology is offering us. Many of my colleagues have never heard of MOOCs and it is really a pity. I think that those in the field of youth work should be promoted more*."

1.3.4. Analysis of findings

The analysis and discussion of the findings is done by presenting a three-stage model that:

a) Describes the cultural identity of the youth workers,
b) Illustrates the youth workers' familiarity with MOOCs and their perceptions of the significance of the organizational change issues and problems deriving from the adoption of MOOCs,
c) Highlights the ways in which youth workers perceive the overcoming of an anticipated organizational change process.

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1.3.4.1. Framing the youth workers' identity and characteristics

The findings regarding the determinants for becoming a youth worker are consistent with the collective identity theory.

The collective identity theory explains a group's identity according to the common culture that the group's members share. Culture refers to the collection of beliefs, values and ideologies of individuals to be found within a group that illustrates the significance of a specific problem and highlights ways in which this problem can be overcome. (Ryan & Gamson, 2006, p. 14) define this frame as follows:

"*Like a picture frame, an issue frame marks off some part of the world. Like a building frame, it holds things together. It provides coherence to an array of symbols, images and arguments, linking them through an underlying organizing idea that suggests what is essential, what consequences and values are at stake. We do not see the frame directly, but infer its presence by its characteristic expressions and language. Each frame gives the advantage to certain ways of talking and thinking, while it places others out of the picture*."

The findings revealed four major categories of reasons for which current youth workers joined and remained for a number of years in this position.

The first reason highlighted the psychological support and the alternative way that they found in the organization; the support that was offered to them and the support that they offered to the young people.

The second reason highlighted the importance of experience that youth workers received; an experience that proved important in their personal life too.

The third reason referred to the unexplained "aura" that youth organizations transpired to the members and staff; unexplained because youth workers could not understand what the "attraction" reason was.

The fourth category identified the role of relatives and other people in promoting their enrolment to the activities of youth organizations. Based on their own personal experience members of the organizations anticipated that new members and workers would be attracted by the same reasons for which current members and workers found interest in youth organizations. By expressing their own experiences and by creating a sense of organizational identity and culture, the youth workers emphasized that the reasons for which they joined the organization gave them the chance to fulfil their emotional needs by offering support and services to young people.

1.3.4.2. Addressing the challenge of organizational learning

Organizational learning is defined as the process by which an organization adopts certain types of activity in order to improve its capacity and ability to act (Probst & Buchel, 1997).

There are five characteristics that can promote organizational learning; the first is the existence of a group structure able to promote internal and external team-working, the second is the acquisition of information systems that can promote the sharing of available information and the third is the adoption of human resource practices like rewarding that can, in turn, promote the manifestation of new working skills and knowledge, the fourth is the development of an organizational culture based

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on specific norms and values, able to guide the learning processes and finally the fifth is the promotion of leadership that can encourage successful learning (Cummings & Worley, 2001, pp. 522-524).

The need for organizational learning has had an influence also on the youth workers' view on the feasibility of the local process of change to MOOC education. In particular, the commitment to purpose, which entails the responsiveness to the members' needs and encourages the alignment of services with the organization's mission (Gill, 2010, p. 763) stresses that organizational mission can be influential when confronted with the dilemma of applying new organizational technologies (McDonald, 2007, p. 256). The commitment to a clear and comprehensive mission facilitates the selection of the most appropriate innovations.

An example is the Scout organization whose mission is the accomplishment of youth development through interaction with nature. Youth workers have corresponded during the lockdown period with the designation of online activities, questioning at the same time how the mission of their organization could be accomplished through the provision of MOOCs.

The findings of the interviews underlined, on various occasions, the need to preserve the character of the organizations and further develop programs that will aim at helping young people to cope with today's societal challenges. Again, organizational learning is present through the need to commit to the purpose of the organization, which entails responsiveness to membership needs and encourages the alignment of services with the organization's mission. The need to follow a successful transformation within the organization was perfectly encapsulated in the following quotation:

"We are resistant to change because we are afraid that by changing, we may change also the mission of our organization. This is not our purpose…I think we are resistant to anything new. I recall a period when we thought that it was about time to start focusing on priority programs and leave everything else aside. And then we started quarrelling, on a friendly basis of course, with each other…You see the other programs brought us members. But I wonder whether this practice has altered the character of our organization…"

1.3.4.3. Addressing the challenge of MOOCs' adoption

There are four processes whose operation results in organizational evolution (Aldrich, 1999). The first is the process of variation that occurs when people search for solutions to organizational problems. The second is the process of selection during which forces either external or internal to an organization affect its routine operation. The third is the retention process whereby initial variations become standardized and institutionalized. Finally, the process of struggle refers to the struggle of becoming legitimized.

With regards to the variation process, youth workers favour the identification of opportunities that can help in the development of their services provision. Concerning the selection process, the impact of the MOOCs adoption implied the need to consider drastic organizational changes in order to ensure an up-to-date organizational function. Moreover, with respect to the standardization and institutionalization of initial variations, the way in which existing members target particular young people for recruitment reflects not only the existing organizational culture but also a serious bias to preserve this culture. However, young people do have special needs and visions that need to be met. it is important to be aware of and take into account the specific characteristics of individuals that are a part of the total system. Attempts to ignore these characteristics can only lead to an unsuccessful organizational change. Finally, the issue of legitimacy refers to the adaptability of organizations to

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follow social developments and shape accordingly their way of working and operating in order to meet contemporary trends. Youth workers acknowledged that the provision of youth services ought to be changed because the world around them is changing too.

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1.4. Conclusions from the primary and secondary research

The following conclusions were drawn based on the primary and secondary research, including the analyses of data and information collected:

- The digital citizenship domain is a complex and challenging field. The young people's awareness regarding its risks and the skills necessary to become good digital citizens are highly required by students and needed by local communities and European countries.
- The MOOCs have been expanding over the last couple of years and proved useful during the Covid-19 pandemic. However, there are several challenges associated with MOOC learning, which need to be addressed by educators.
- One of the most important challenges associated with the use of MOOCs is the design of the MOOC. Many of the existing MOOCs lack engagement, which leads to low completion rates. To improve these, course designers need to come up with new MOOC design concepts.
- The different learning styles of learners pose a serious challenge to course designers. Some may be more visual, others auditory or kinesthetic; some are activists, theorists, reflectors or pragmatists. How to design a course to offer a meaningful and fruitful learning opportunity for all is a major challenge which must be addressed in order to improve course completion rates.
- Another challenge is related to the digital skills of course designers, course managers and students. Simply having access credentials as a manager, teacher or learner does not guarantee that these will know how to register, enrol and carry out the activities required for their respective roles.
- The availability of the internet connection and laptop/tablet/mobile devices could also influence the access and experience of users attending MOOCs. While course designers could not influence these directly, they may be able to keep these in mind from the early design stages, so that the courses could be followed from multiple devices and with intermittent or poor internet connection.
- The evaluations in online courses are also relevant items to be considered. While most prefer multiple choice questions, for those who want to test and improve understanding, analytical skills and the ability to synthesize and create new things, the assessment could be problematic and may require multiple evaluation opportunities along the way. Peer assessments may be an alternative in MOOC format.
- From the primary research carried out, the research team also concluded that most young people are interested to learn something new and developing their skills, rather than solving problems. This need to be considered while designing and managing online courses in MOOC format.
- Finally, a word of caution for training providers and course managers. Considering the current information overload on the internet, the most important factor besides cost when deciding whether to follow an online course or not, is the course quality. Apparently, young people nowadays do not just want certification, but good quality information and learning experience.

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2. MOOC Canvas for digital citizenship

Digital citizenship skills are undoubtedly the most valuable skills for a healthy mind society, but teaching online courses to develop these skills is challenging. We propose 10 topics for which we will develop 10 MOOC Canvases. We aim at providing teachers and youth workers with innovative methodologies to harness the potential that digitalization represents for the active citizenship of their target groups. The topics are grouped into three main categories:

I. BEING ONLINE
- **Access and inclusion** - competences necessary for overcoming different forms of the digital divide and opening digital spaces to minorities and different opinions
- **Learning and Creativity** - willingness to learn and apply the attitude towards learning through digital environments throughout life and the capacity to develop and express different forms of creativity with different tools in different contexts
- **Media and Information Literacy** - one's own abilities to interpret, critically understanding and expressing one's own creativity through digital media

II. WELLBEING ONLINE
- **Ethics and Empathy** - promote positive online behaviours and interactions
- **Health and Wellbeing** - raise awareness of the issues and the opportunities that can affect citizens' wellness in a digitally rich world
- **e-Presence and Communication** - competences like online communication and interaction with others through virtual social spaces

III. RIGHTS ONLINE
- **Active Participation** - competences that citizens need to be fully aware of how they interact within the digital environments they inhabit in order to make responsible decisions, whilst participating actively and positively in the democratic cultures in which they live
- **Rights and Responsibilities** - awareness and understanding of their rights and responsibilities in the online world
- **Privacy and Security** - personal protection, data protection, digital identity protection, security measures and safe and sustainable use
- **Consumer Awareness** - implications of the commercial reality of much online space

The MOOC Canvas for teaching digital citizenship skills will follow Merrill's 5 principles of instruction: problem-orientation, activation, demonstration, application and integration.

Later on, each MOOC Canvas will be accompanied by lesson/ session plans and practical instructions, to provide youth workers with an affordable and flexible way to learn how to promote digital citizenship to young people.

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2.1. MOOC Canvas concept

The MOOC Canvas is a conceptual framework for supporting educators in the description and design of MOOCs. It is inspired by Business Model Canvas and it is a good start to evaluate the necessary resources before starting online course development. The MOOC Canvas defines eleven interrelated issues that are addressed through a set of questions (section 2.2), offering visual and understandable guidance for educators during the MOOC design process (Alario-Hoyos, 2014).

<table>
<tr><td>MOOC Canvas</td><td>Designed by:</td><td>Date:

Version:</td></tr>
<tr><td>1. Human</td><td>2. Intellectual</td><td>3. Equipment</td></tr>
<tr><td rowspan="5">4. Platform</td><td colspan="2">5. General Description</td></tr>
<tr><td colspan="2">6. Target Learners</td></tr>
<tr><td>7. Pedagogical Approaches</td><td>8. Objectives and Competences</td></tr>
<tr><td>9. Learning Contents</td><td>10. Assessment Activities</td></tr>
<tr><td colspan="2">11. Complementary Technologies</td></tr>
<tr><td>Available Resources</td><td colspan="2">Design Decisions</td></tr>
</table>

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The first sections (grey) refer to those key resources available (or potential to be at the disposal of teachers) at the time of designing the MOOC.

1) Human resources
2) Intellectual resources
3) Equipment
4) Platform

Once the available resources are filled in, the focus moves on to the design decisions around the online course.

5) General description
6) Target learners
7) Pedagogical Approaches
8) Objectives and competences
9) Learning contents
10) Assessment activities
11) Complementary technologies

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2.2. Questions to guide MOOC course design

In their Proposal for a conceptual framework for educators to describe and design MOOCs - a research article published in the Journal of Universal Computer Science, (Alario-Hoyos, 2014) suggested some relevant questions to guide the MOOC course designer.

<table>
<tr><td>MOOC Canvas</td><td>Designed by:</td><td>Date:
Version:</td></tr>
<tr><td>1. Human
(1.1) What human resources (number of people available and dedication in hours…) do you have for launching the MOOC?
(1.2) Do you have the possibility of hiring someone else to help you in the operation of the MOOC?</td><td>2. Intellectual
(2.1) What intellectual resources (learning materials, OERs, pictures, videos…) do you have for launching the MOOC?
(2.2) Do you have the possibility of paying for additional intellectual resources?</td><td>3. Equipment
(3.1) What hardware resources (recording studios, cameras…) do you have for preparing the contents?
(3.2) What software resources (licenses for video recording and editing software…) do you have for preparing the contents?
(3.3) Do you have the possibility of buying/hiring additional hardware or software resources?</td></tr>
<tr><td rowspan="5">4. Platform
(4.1) Regarding learning contents: What types of formats (multimedia, text…) are supported in your platform?
(4.2) Regarding assessment activities: What type of assessment activities (multiple choice, peer review…) are supported in your platform?
(4.3) Do you have any social tools available on your platform?</td><td colspan="2">5. General Description
(5.1) What is the name of your MOOC?
(5.2) What is the duration (in weeks) of your MOOC?
(5.3) What is the field/area of your MOOC?</td></tr>
<tr><td colspan="2">6. Target Learners
(6.1) What countries do learners come from?
(6.2) What is the literacy of learners?
(6.3) What professional sectors do learners belong to?
(6.4) What is the motivation of learners to join the course?</td></tr>
<tr><td>7. Pedagogical Approaches
(7.1) What pedagogical approach/es and/or teaching methods are you going to use to design your course (knowledge dissemination, connectivism, project-based learning, case-based learning, collaborative learning, active learning...)</td><td>8. Objectives and Competences
(8.1) What are the learning objectives of the course?
(8.2) What are the competencies that learners should acquire during the course?</td></tr>
<tr><td>9. Learning Contents
(9.1) How are you going to structure learning contents?
(9.2) What formats are you going to employ for learning contents (videos, pdfs, ppts, e-books...)?
(9.3) Does your platform allow this structure and formats?</td><td>10. Assessment Activities
(10.1) What formative assessment activities are you going to include?
(10.2) What summative assessment activities are you going to include?
(10.3) Does your platform allow these assessment activities?</td></tr>
<tr><td colspan="2">11. Complementary Technologies
(11.1) Are you going to use complementary technologies for delivering learning contents (YouTube, Flicker...)?
(11.2) Are you going to use complementary technologies for the assessment activities (Hot Potatoes...)?
(11.3) Are you going to use complementary technologies for promoting communication and discussion among learners (Facebook, Twitter...)?</td></tr>
<tr><td>Available Resources</td><td colspan="2">Design Decisions</td></tr>
</table>

If you need some additional support to fill in your CANVAS, the next section can help to structure your e-course.

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2.3. Additional support to fill in the MOOC Canvas

MOOC Canvas can be better understood by examples. The next section was developed to guide practising teachers from all types of education with all levels of experience and student teachers preparing for entry into the profession, to structure their teaching resources for online education.

We chose **Ethics and Empathy** course to provide examples for filling in each cell.

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1. Human/ Staff

Teachers/trainers prepare the course materials, deliver the e-course content, design assessment activities, evaluate the achievements, collect and analyse feedback and propose/suggest modifications.

Youth workers design the exercises, case studies, practical activities, guides for workshops, forum and any other individual or group assignments.

Technicians deal with the technical part of course design (recording, video, audio).

MOOC platform admins set up the platform and assist the teaching staff in properly delivering the e-course items. Admins deal with any technical issues that may occur. It is advisable to provide an e-mail address for technical support.

In this section, it is necessary to specify the number and categories of staff involved in the e-course development, as well as the required numbers of hours for each of them to ensure the objectives are met.

1. Staff

Learning materials development

1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters

1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters

1.3. Technician. 10 working days to design 5 .ppt + audio + video

1.4. Platform Admin. 5 working days to set up the platform for course delivery

Assessment tools development

1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter

1.2. Platform Admin. 5 working days to set up the platform for assessment

Course delivery

1.1 Trainer. Two hours per day/ 5 days per course

1.2. Facilitator. Two hours per day/ 5 days per course

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2. Intellectual/ Teaching resources

The learning resources available for each course will be specified in this section:

- own materials
- references
- other resources

Teachers/trainers are responsible for obtaining permission to use the learning materials. All resources will be provided in an editable format and with copyright acceptance for publication.

2. Teaching Resources

2.1. Word version of learning materials

2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)

2.3. Audio course

2.4. Video materials

2.5. Examples, exercises + case studies for each chapter

2.6. Links for references and other additional intellectual resources.

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3.

Equipment

Besides the intellectual contribution, the team working on e-course elaboration need to bring visual and audio attractiveness.

The development of e-course content and visual design requires:

- Hardware (PC, recording tools, cameras)
- Software (licenses for audio-video recording and editing software) resources.

This section specifies the equipment, software and licenses needed to meet the quality criteria set for the MOOC Platform.

If free software or resources are available, please specify them here.

3. Equipment

3.1. Hardware

- PC
- any other hardware you may need

3.2. Software

- Canva for design photos/ slides or videos – Free version available
- OBS Studio for screen recording – Free version available
- Any other software you may need

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4.

Platform

Accessibility for users. Self-registration is an important aspect of the MOOC platform and e-mail user verification has to be set up. Nevertheless, a short summary to introduce the potential learner in the context is required. It needs to be available on the front page, allowing learners to find out about the course aim before logging in.

When you choose a MOOC platform, bear in mind to take and give maximum advantages from the learning experience.

Availability of presenting the learning content in various formats (text, embedded .ppt + video + audio, case studies), as well as the range of assessment tools (MCQ, quiz, questionnaire, matching questions, essay, peer review) supported by the platform, need to be taken into consideration.

Interaction with peers and with teachers adds value to the learning experience. Indicate here if workshops, conferences, chats and forums are supported by the platform.

4. MOOC Moodle Platform

4.1. A short description for each e-course is visible to users without logging in.

4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencings.

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5.

General Description

Choose a title that gives sufficient attractiveness and insight to the potential learner. Make it easy to read (not more than six words). If the title is longer than one line, then you can expect low engagement. Be careful to correlate the course title with the course content. False expectations lead to a high abandonment rate.

Participants need to be informed about the duration to be able to plan their learning experiences. Therefore, share with them a course map from the very beginning.

Aim. If you are a teacher, trainer or instructor, you can easily formulate the aim of the e-course. If you are not very experienced in pedagogy, you might need some help to formulate it. Various literature exists for assisting you in defining course aim and objectives. Thorough reading via websites specialized in education will give you several tips, but also some ambiguous directions. Sometimes, after a few hours of reading tips and advice, you might find yourself more confused than at the beginning. However, there is confusion between aim and goal. Often, the objectives introduce terms that can generate difficulties. There is also confusion between course objectives and learning outcomes. Many debates, articles and reports focus on the above terms.

The course aim is a statement that describes the overarching intentions of a course. It should be brief and concise. It should provide learners with an idea of what they can expect from the course. The direction of change. Questions like: What is the purpose of the course? or What is the course trying to achieve? can help you describe the aim. Course aim examples are:

- To encourage positive interaction in the digital world
- To develop learners' capacity to understand and feel other people's experiences, feelings and points of view
- To develop an attitude to promote positive online behaviours and interactions
- To increase learners' ability to recognize and understand the feelings and perspectives of others

Learning goals are broad statements written from an instructor's or institution's perspective that give the general content and direction of a learning experience. They generally describe what an instructor or program aims to do. For example, "*The program will introduce learners to the digital citizenship world.*"

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5. General Description

5.1. Title: Ethics and Empathy

5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).

5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.

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6.

Target Learners

In order to create attractive e-courses and participants to remain enrolled for the entire duration of the course, we propose a student-centred approach. This means that the course is designed with a focus on the learner. Age category, background and motivations are important factors that contribute to delivering e-courses in accordance with learner expectations.

Learner motivation for participation can be intrinsic (passion for the subject, curiosity, relevance to life) and extrinsic (to get a good grade, a certificate, recognition or stopping unwanted behaviour). A survey can be conducted to better understand their motivation.

The language/s available will be specified to allow participants to take maximum advantage of the course.

6. Target Learners

6.1. Age: 12-23 years

6.2. Course language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: be prepared for online interaction; develop ethical behavioural skills and empathic abilities

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7.

Pedagogical Approaches and Teaching Methods

Pedagogy encompasses teaching styles, theory, assessment and feedback. Overall, it refers to all methods and styles used in the teaching process. The theory of pedagogy is ample and several approaches are explored. Before going deeper into theory, it is worth to be mentioned that it is not about black or white. Instead, there are multiple shades of grey.

Pedagogical approaches can be broken down into four categories, as per Tes Global (TesEditorial, 2018):

- Behaviourism (traditional teaching style). Characteristics: teacher-centred, direct instruction, lecture-based, visible and structured activities led by the teacher, it is learner-centred during the assessment, to demonstrate the achievements.
- Constructivism (progressive teaching style). Characteristics: learner-centred, students learn through experiences and reflections, including project work and inquiry-based learning, less teacher talk and can be outdoor. E.g., Montessori, Steiner
- Social constructivism (a blend of the above two). Characteristics: teacher-guided and student-centred, small groups, pair and all class.
- Liberationism focuses on the following characteristics students-centred, democracy, teacher as a learner and discovering the subjects together.

There are other ways of classifying pedagogical approaches. Experts in effective pedagogies (EvelynLearning, 2020) recommend 5-type pedagogical approaches:

- Constructivist
- Reflective (appropriate for MOOC). Characteristics: reflective approach, the teacher is an observer.
- Collaborative. Characteristics: students work in small teams
- Integrative approach. Characteristics: real-world application
- Inquiry-based approach. Characteristics: student-centred, students ask questions and use various skills (problem-solving, applying methods) to reach the solution.

A different classification is proposed by IIEP (LearningPortal, 2021), which classifies the pedagogical approaches into three main types:

- Teacher-centred pedagogy. Characteristics: whole-class lecture, rote memorization and chorus answers. E.g., traditional teaching style
- Learner-centred pedagogy. Characteristics: students use prior knowledge and new experiences; the teacher creates the educational context and facilitates the learning process. E.g., constructivist, student-centred, participatory, active
- Learning-centred pedagogy. Characteristics: consider the above two and leave the teacher the freedom to evaluate the context and adapt the approach to support the learning process.

Online education faces the challenges of non-having teachers in front of the classroom next to their students. E-courses can be synchronous,

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asynchronous or mixt. Regardless of the type, we give the learner an overview of the entire learning experience. Thus, we provide sufficient information for the learner to understand the expectation, tasks and involvement. The pedagogical approach will be a mix of the above directing the learner towards an innovative learning experience.

7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

- Students use prior knowledge and new experiences to develop new skills (constructivism)
- Teachers create the educational contexts and facilitate the learning process, guiding students as they learn new concepts
- Reflective approach. The teacher is an observer
- Integrative approach. Real-world application

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8.

Objectives and Competences

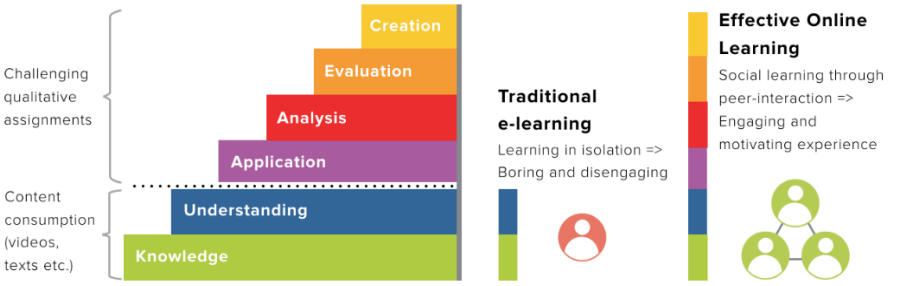
Course objectives are specific statements that include an action verb and a content reference. They can be assessed through class activities and assignments. Usually, the objectives are written in terms of what teachers expect students to learn. Sometimes, they are written in terms of what teachers intend to teach. In short, course objectives are about the e-course content from the authors' perspective.

Action verbs must be carefully chosen. There is a specific order according in which learners can process all the information in a course. Bloom's taxonomy clarifies the natural order and provides a range of verbs.

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define	classify	apply	analyze	arrange	assess
identify	compile	calculate	calculate	assemble	compare
label	conclude	demonstrate	categorize	compose	critique
list	discuss	develop	classify	construct	decide
match	describe	interpret	criticize	design	determine
name	explain	locate	compare	develop	establish
recall	express	operate	contrast	diagnose	evaluate
recognize	give examples	perform	determine	manage	judge
record	identify	practice	differentiate	organize	justify
relate	interpret	predict	distinguish	plan	measure
repeat	recognize	present	examine	propose	rate
select	summarize	report	outline	relate	recommend
state	translate	use	test	summarize	select

Action verbs, Bloom's taxonomy

Note: Objectives are formulated for each course section/chapter. It is important to design the objectives using Bloom's hierarchical order not to miss essential levels. Achievement of the lower level would allow learners to proceed and achieve superior-level objectives.



Bloom's taxonomy E-learning vs iversity Source: https://iversity.org

Words to avoid:

appreciate	believe	improve	learn
approach	grasp the significance of	increase	thinks critically
become	grow	know	understand

While designing the objective, it is important to use one single verb for one objective. Because they need to be assessed at a later stage, they need to be treated separately from the beginning. Therefore, do not use more verbs and content references in each objective.

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For example, at the end of this module:

- Learners should recognize positive/negative behaviour interactions in the online world.
- Learners should identify ethical behaviour from other people's experiences
- Learners should illustrate empathic behaviour for certain online communication
- Learners should distinguish moral dilemmas relating to other peoples' feelings and points of view
- Learners should be able to create online interactions that promote positive online behaviours
- Learners should be able to evaluate peers' online interactions from an ethical and empathic perspective

This stage of designing the objectives is important because it helps organize the course materials in logical sequences and align with the evaluation methods. Bear in mind that these are not final. These will be adjusted and even replaced while the course content and instructional design will be developed.

Learning outcomes

Learning outcomes are learner-focused. They are similar to objectives but written in terms of what learners will be able to do when they successfully complete a learning experience. Effective learning outcomes are **student-centred**, measurable, concise, meaningful, achievable and outcome-based (rather than task-based).

What will students gain from the course? For example, "*Learners will be able to recognize positive/negative behaviour interactions in online world*" or "*Learners will be able to identify ethical behaviour from other people's experiences***."**

Competences

Competencies are combinations of attitudes, skills and knowledge that participants develop during the course. For example:

- Capacity to understand and feel other people's experiences, feelings and points of view
- An attitude that promotes positive online behaviours and interactions
- Ability to recognize and understand the feelings and perspectives of others

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8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

- Recognize positive/negative behaviour interactions in the online world.
- Identify ethical behaviour from other people's experiences
- Illustrate empathic behaviour for certain online communication
- Distinguish moral dilemmas relating to other peoples' feelings and views
- Create online interactions that promote positive online behaviours
- Evaluate pears' online interactions from the ethical and empathic perspective

8.2. Competencies

- Capacity to understand and feel other people's experiences, feelings and points of view
- An attitude that promotes positive online behaviours and interactions
- Ability to recognize and understand the feelings and perspectives of others

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9. Learning Contents

The basic concept of these e-courses is to create an attractive learning environment. The initial plan is to provide learning content for digital citizenship skills in several formats suitable for various learning styles of potential learners. We aim to leave the freedom to participate, read and interact in participants' own peace. Therefore, we chose asynchronous teaching and various course formats (pdf, ppt, video and audio) as well as individual assessments. Until this point, everything seems clear and focused on the subject that we want the learners to know.

The question is: Are the learners aware of the need for certain behaviour or skills development?

The answer to this question will give us an indication of the next structure of the learning contents. For example, if the learner wants to learn to Corel Draw, then it is straight. We do our best to teach and support him or her to develop new skills and competencies.

What about empathy? Do you know somebody interested in being more emphatic? Maybe yes. But to enrol a course for this? Most probably no. They often have no idea why it is important to be empathic or how would impact their daily life.

From this perspective, you might need to create an intellectual need for skills and behaviour development. You can do this by introducing scenarios that facilitate reflection. Bringing real-life situations and focusing more on characters' feelings rather than their reactions will help participants to reflect. Thus, reflections and discussions about a situation that they encountered lead to improvements in skills. Moreover, it keeps the participants involved and anchored in the course topic.

Coming back to the big picture, we structure the learning contents into sections, chapters, scenarios, exercises, quizzes, case studies as well as review sections. The content is designed in small chunks of information to gradually reach the objectives, maintaining at the same time a constant view of the course aim.

9. Learning contents

9.1. Structure: sections (5 chapters). Each section comprises:

- short overview introducing the expected learning outcomes
- text and images
- exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
- additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio

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10. Assessment Activities

Formative assessments bring a win-win-win value. It is an ongoing process of evaluations throughout the course, which allows you to track the progress in learning. There are multiple advantages of using it and, MOOC platforms provide an ample variety of assessment tools.

Commonly, **formative assessments**:

- Are instruments to monitor learners' progress. It helps understand the course sections where learners are more involved and those less attractive
- Help teachers recognize where participants are struggling and address problems immediately
- Respond to youth needs that prefer the quizzes, tests and practical assessments to be completed throughout the course

For example:

- Submit one or two sentences as feedback/comments to colleagues' posts
- Draw a concept map

Summative assessment represents the final evaluation of learning achievements.

For example:

- Mid-term or final exam (multiple choice questions, essay, project).

10. Assessment tools

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions

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11.

Complementary Technologies

Please specify here, if you are going to use complementary technologies for course delivery, assessment and communication, other than those available in the MOOC platform.

11. Complementary technologies

11.1. For course delivery: YouTube

11.2. For assessment: Lino, Kahoot

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2.4. Specific MOOC Canvases for 10 digital citizenship topics

2.4.1. Access and Inclusion

The module “Access and inclusion” deals with the competences necessary for overcoming different forms of the digital divide and opening digital spaces to minorities and different opinions. Online environments are ideal spaces for expanding multiculturalism and democratic values. They can also, when abused, result in the opposite effects. This course teaches participants how to guide themselves and others into more open attitudes and inclusive behaviours to embrace the diversity inherent in the online community and resolve conflicts by expressing themselves in more productive ways while guarding against unproductive divisive attitudes.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: SEAL Cyprus</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Educational materials development
1.1. Researcher. 16 working days to prepare educational material (30-35 pages) = 5 chapters
1.2. Facilitator/Youth worker/Trainer. 16 working days to prepare exercises, case studies (15-20 pages) for 5 chapters including presentations and assessment exercises as well as the delivery of 10 hours of training to participants including the facilitation of the training course</td><td>2. Intellectual/Teaching resources
2.1. Accumulated editable version of learning materials
2.2. Editable Powerpoint presentations for each chapter
2.3. Audio-visual materials
2.5. Examples, exercises + case studies
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment and Material
3.1. Hardware
• Laptop
• Internet connection
• Notetaking material
3.2. Software
• Image and video editing software
• Office or equivalent</td></tr>
<tr><td rowspan="2">4. Platform
4.1. A short description for each e-course is visible to users without logging in.
4.2. Course content in various formats: word files, embedded text and PPT, audio-visual material and case studies.
4.3. Assessment: various types of questions, questionnaires and self-assessments available
4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5. General Description
5.1. Title: Access and inclusion
5.2. Five-day course 2 hours a day. Each day comprises a workshop (one chapter) and individual or group tasks for participants.
5.3. A short paragraph to introduce (50-80 words) the learning goals and aim of the e-course as well as its schedule.</td></tr>
<tr><td colspan="2">6. Target Learners
6.1. Age: 12-23 years
6.2. Language: English | Romanian | German | Greek
6.3. Background: secondary school/ high school/ faculty</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr><td rowspan="3"></td><td colspan="2">6.4. Motivation: be prepared for online interaction and group assignments; develop Access and inclusion behavioural skills and empathic abilities as well as democratic and inclusive viewpoints</td></tr>
<tr><td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism)
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application
• Participatory group work-learner teamwork</td><td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Recognize positive/negative behaviour interactions in the online world.
• Identify inclusive and democratic behaviour
• Illustrate inclusive and democratic behaviour for certain online communication
• Recognize methods for safe searches and behaviourally correct online sites
• Create online interactions that promote positive online behaviours
• Evaluate pears online

8.2. Competencies

• Capacity to understand what constitutes acceptable online behaviour
• Ability to report discriminatory and non-democratic behaviour online
• Attitude that promotes positive online behaviours and interactions
• Ability to conduct safer online experiences
• Ability to recognize and understand the effects of online marginalization</td></tr>
<tr><td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio</td><td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

	11. Complementary Technologies 11.1. For course delivery: YouTube 11.2. For assessment: Lino.
Available Resources	Design Decisions

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2.4.2. Learning and Creativity

Creativity is one of the most important characteristics of being human. Learning is a lifelong process. Participants in this course will bring together "learning" and "creativity" in an innovative way to increase their self-confidence and broaden own perspectives. They will learn new thinking processes and will explore how to apply them in everyday work.

Do not forget: coming up with original ideas can improve anything from a school project to the way a factory works.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: T4E, Romania</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Learning materials development
1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters
1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters
1.3. Technician. 10 working days to design 5 .ppt + audio + video
1.4. Platform Admin. 5 working days to set up the platform for course delivery
Assessment tools development
1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter
1.2. Platform Admin. 5 working days to set up the platform for assessment
Course delivery
1.1 Trainer. Two hours per day/ 5 days per course
1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources
2.1. Word version of learning materials
2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)
2.3. Audio course
2.4. Video materials
2.5. Examples, exercises + case studies for each chapter
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment
3.1. Hardware
• PC
3.2. Software
• Canva for design photos/ slides or videos – Free version available
• Storyboard https://www.storyboardthat.com/ - Free version available
• OBS Studio for screen recording – Free version available</td></tr>
<tr><td>4. Platform
4.1. A short description for each e-course is visible to users without logging in.</td><td colspan="2">5. General Description
5.1. Title: Learning and Creativity
5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr><td rowspan="5">4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
<tr><td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: discover how creativity is the key to progress; interest in the creative process, the desire to explore and a spirit of curiosity;</td></tr>
<tr><td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism). If teaching does not engage their prior knowledge, students often learn information just well enough to pass the test and then revert to their misconceptions outside of the classroom.
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts. Disciplined improvisation allows students to be creative, yet guided by teachers as per four top-down structures: (1) curriculum, (2) assessments, (3) learning goals and (4) teacher practices.
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application</td><td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Select different modes of thinking.
• Apply various modes of thinking to improve own learning
• Determine learning chunks of information that the mind can easily access
• Apply creative and design thinking to real-world situations
• Use methods and tools to produce ideas for enhancing areas of their own work
• Evaluate and choose the best ideas and solutions

8.2. Competencies

• Capacity to understand and apply thinking strategies
• Attitudes that encourage creativity
• Ability to apply creative problem-solving techniques</td></tr>
<tr><td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio</td><td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td></tr>
<tr><td colspan="2">11. Complementary Technologies</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

	11.1. For course delivery: YouTube, https://www.storyboardthat.com/ 11.2. For assessment: https://scratch.mit.edu/educators
Available Resources	Design Decisions

DOI: 10.5281/zenodo.7092424

2.4.3. Media and Information Literacy

Media is an industry and all of us are exposed to its influence. Web portals contain wide information that is rarely checked against veracity. The "Media and Information Literacy" course aims to equip participants with critical information skills which are crucial for lifelong learning. Participants in this course will identify the effects that media and advertising have on us; understand the benefits and potential negative effects of media content and the importance of real-world knowledge.

You will learn new techniques to become more media literate as individuals and in society.

MOOC Canvas	Designed by: T4E, Romania	Date: September 2020 Version: 1.0
1. Human/Staff Learning materials development 1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters 1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters 1.3. Technician. 10 working days to design 5 .ppt + audio + video 1.4. Platform Admin. 5 working days to set up the platform for course delivery Assessment tools development 1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter 1.2. Platform Admin. 5 working days to set up the platform for assessment Course delivery 1.1 Trainer. Two hours per day/ 5 days per course 1.2. Facilitator. Two hours per day/ 5 days per course	**2. Intellectual/Teaching resources** 2.1. Word version of learning materials 2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text) 2.3. Audio course 2.4. Video materials 2.5. Examples, exercises + case studies for each chapter 2.6. Links for references and other additional intellectual resources.	**3. Equipment** 3.1. Hardware • PC 3.2. Software • Canva for design photos/ slides or videos – Free version available • Storyboard https://www.storyboardthat.com/ - Free version available • OBS Studio for screen recording – Free version available
4. Platform	**5. General Description** 5.1. Title: Media and Information Literacy	

DOI: 10.5281/zenodo.7092424

<table>
<tr>
<td rowspan="4">4.1. A short description for each e-course is visible to users without logging in.

4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td>
<td colspan="2">5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).

5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td>
</tr>
<tr>
<td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: develop an informed, critical and practical understanding of new communication media including analysis of digital media;</td>
</tr>
<tr>
<td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism). If teaching does not engage their prior knowledge, students often learn information just well enough to pass the test and then revert to their misconceptions outside of the classroom.
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts. Disciplined improvisation allows students to be creative, yet guided by teachers as per four top-down structures: (1) curriculum, (2) assessments, (3) learning goals and (4) teacher practices.
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application</td>
<td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Define information needs
• Identify sources of information
• Explain the role and functions of media in democratic societies
• Determine the accuracy of the content
• Apply retrieval tools
• Assess information sources against reliability, validity, accuracy, authority, timeliness and points of view or biases among several evaluation criteria
• Produce media and information content

8.2. Competencies

• Capacity to process information
• Attitude to make ethical use of information
• Ability to critically evaluate media content
• Capacity to design media content</td>
</tr>
<tr>
<td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections</td>
<td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td>
</tr>
</table>

DOI: 10.5281/zenodo.7092424

	9.2. Course formats pdf, images, ppt, video and audio	
	11. Complementary Technologies 11.1. For course delivery: YouTube, https://www.storyboardthat.com/ 11.2. For assessment: CRAAP	
Available Resources	Design Decisions	

DOI: 10.5281/zenodo.7092424

2.4.4. Ethics and Empathy

Ethics and Empathy are behaviours that maintain “peace”! Participants in this course will understand the roles of Ethics and Empathy in the digital world. Unethical online behaviour has negative even dramatic consequences. We propose a learning environment that promotes positive behaviours and interactions. You will develop your capacity to understand and feel other people’s experiences, feelings and points of view.

Are you ready? Do your best to leave a place better than you found it (Baden Powell)!

<table>
<tr><td>MOOC Canvas</td><td>Designed by: T4E, Romania</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Learning materials development
1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters
1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters
1.3. Technician. 10 working days to design 5 .ppt + audio + video
1.4. Platform Admin. 5 working days to set up the platform for course delivery
Assessment tools development
1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter
1.2. Platform Admin. 5 working days to set up the platform for assessment
Course delivery
1.1 Trainer. Two hours per day/ 5 days per course
1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources
2.1. Word version of learning materials
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2.3. Audio course
2.4. Video materials
2.5. Examples, exercises + case studies for each chapter
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment
3.1. Hardware
• PC
3.2. Software
• Canva for design photos/ slides or videos – Free version available
• OBS Studio for screen recording – Free version available</td></tr>
<tr><td>4. Platform
4.1. A short description for each e-course is visible for users without logging in.</td><td colspan="2">5. General Description
5.1. Title: Ethics and Empathy
5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr><td rowspan="4">4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
<tr><td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: be prepared for online interaction; develop ethical behavioural skills and empathic abilities</td></tr>
<tr><td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism)
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application</td><td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Recognize positive/negative behaviour interactions in the online world.
• Identify ethical behaviour from other people’s experiences
• Illustrate empathic behaviour for certain online communication
• Distinguish moral dilemmas relating to other peoples’ feelings and points of view
• Create online interactions that promote positive online behaviours
• Evaluate pears online interactions from an ethical and empathic perspective

8.2. Competencies

• Capacity to understand and feel other people’s experiences, feelings and points of view
• Attitude to promote positive online behaviours and interactions
• Ability to recognize and understand the feelings and perspectives of others</td></tr>
<tr><td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)</td><td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

	• additional resources (in case the learner is interested in reading more) as well as review sections 9.2. Course formats pdf, images, ppt, video and audio	
	11. Complementary Technologies 11.1. For course delivery: YouTube 11.2. For assessment: Lino, Empathy quiz: https://greatergood.berkeley.edu/quizzes/take_quiz/empathy Web App to check how polite your message is. http://politeness.cornell.edu/ Evaluate abilities to spot the troll: https://spotthetroll.org/	
Available Resources	Design Decisions	

DOI: 10.5281/zenodo.7092424

2.4.5. Health and Wellbeing

This domain concerns one's awareness of the issues and the opportunities that can affect his/her wellness in a digitally rich world. Digital citizens inhabit both virtual and real spaces. For this reason, the basic skills of digital competence are not sufficient. Individuals also require a set of attitudes, skills, values and knowledge that render them more aware of issues of health and wellbeing.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: ALLI, Greece</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Learning materials development
1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters
1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters
1.3. Technician. 10 working days to design 5 .ppt + audio + video
1.4. Platform Admin. 5 working days to set up the platform for course delivery
Assessment tools development
1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter
1.2. Platform Admin. 5 working days to set up the platform for assessment
Course delivery
1.1 Trainer. Two hours per day/ 5 days per course
1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources
2.1. Word version of learning materials
2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)
2.3. Audio course
2.4. Video materials
2.5. Examples, exercises + case studies for each chapter
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment
3.1. Hardware
• PC
3.2. Software
• Canva for design photos/ slides or videos – Free version available
• OBS Studio for screen recording – Free version available</td></tr>
<tr><td>4. Platform
4.1. A short description for each e-course is visible to users without logging in.</td><td colspan="2">5. General Description
5.1. Title: Health and Wellbeing
5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr><td rowspan="4">4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
<tr><td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: develop well-balanced future citizenship skills</td></tr>
<tr><td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism)
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application</td><td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Know the criteria based on which a behaviour related to the use of digital means can be considered an addiction
• Understand how their wellbeing is endangered by the potential use, misuse and overuse of the digital and technological media devices
• Apply useful tips on their personal use of media and computers (e.g., related to ergonomics, sleep, social interactions and personal relationships)
• Assess their online behaviours and practices and how to amend them for their own benefit
• Connect digital health and wellbeing to their roles as active citizens in their societies

8.2. Competencies

• Capacity to apply good and healthy digital behaviours and avoid negative and dangerous ones
• Attitude to balance online and offline activities for their wellbeing
• Ability to moderate their use of digital means for their own benefit and the benefit of their work, family and social environment</td></tr>
<tr><td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections</td><td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

	9.2. Course formats pdf, images, ppt, video and audio	
	11. Complementary Technologies 11.1. For course delivery: YouTube, https://www.youtube.com/watch?v=bLBKUbnLYTs&t=11s&ab_channel=Techquickie 11.2. For assessment: Lino, Kahoot https://plato.algonquincollege.com/ac-library/healthWellness/story_html5.html	
Available Resources	Design Decisions	

DOI: 10.5281/zenodo.7092424

2.4.6. e-Presence and Communication

The module “e-Presence and Communication” deals with competences related to online communication and interaction with others through virtual social spaces. More and more people are spending a greater part of their lives online for many reasons that expand beyond work and entertainment. Maintaining an active online presence in turn becomes increasingly important in terms of both work and personal life. Knowing how to communicate and address issues related to one’s virtual profile as well as image is among the top eSkill that people, especially young ones should master.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: SEAL Cyprus</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Educational materials development
1.1. Researcher. 16 working days to prepare educational material (30-35 pages) = 5 chapters
1.2. Facilitator/Youth worker/Trainer. 16 working days to prepare exercises, case studies (15-20 pages) for 5 chapters including presentations and assessment exercises as well as the delivery of 10 hours of training to participants including the facilitation of the training
per course</td><td>2. Intellectual/Teaching resources
2.1. Accumulated editable version of learning materials
2.2. Editable Powerpoint presentations for each chapter
2.3. Audio-visual materials
2.5. Examples, exercises + case studies
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment and Material
3.1. Hardware
• Laptop
• Internet connection
• Notetaking material
3.2. Software
• Image and video editing software
• Office or equivalent</td></tr>
<tr><td rowspan="2">4. Platform
4.1. A short description for each e-course is visible to users without logging in.
4.2. Course content in various formats: word files, embedded text and PPT, audio-visual material and case studies.
4.3. Assessment: various types of questions, questionnaires and self-assessments available
4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5. General Description
5.1. Title: e-Presence and Communication
5.2. Five-day course 2 hours a day. Each day comprises a workshop (one chapter) and individual or group tasks for participants.
5.3. A short paragraph to introduce (50-80 words) the learning goals and aim of the e-course as well as its schedule.</td></tr>
<tr><td colspan="2">6. Target Learners
6.1. Age: 12-23 years
6.2. Language: English | Romanian | German | Greek
6.3. Background: secondary school/ high school/ faculty
6.4. Motivation: be prepared for online interaction and group assignments; develop e-Presence and Communication behavioural skills and writing, Speaking, reading, listening comprehending as well as overall digital profile presence abilities</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

- Students use prior knowledge and new experiences to develop new skills (constructivism)
- Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
- Reflective approach. Teacher is observer
- Integrative approach. Real-world application
- -Participatory group work-learner teamwork

8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

- Recognize positive/negative behaviour interactions in the online world.
- Identify the trustworthiness of the resources
- Understand how interlinked the online community is and whatever is posted can reaper in numerous forums
- Identify best practices for maintaining a safe and healthy online presence
- Employ e-presence strategies that increase the visibility of profiles
- Understand the differences between communications in the physical world and the digital world
- Recognize online communication methods and the forms they take
- Create online interactions that promote positive online behaviours

8.2. Competencies

- Capacity to understand online communication
- Ability to communicate online in a proper manner
- Ability to create and sustain an online presence
- Ability to use major online applications
- Ability to interact with social media
- Attitude to promote positive online behaviours and interactions

9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

- short overview introducing the expected learning outcomes
- text and images
- exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
- additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio

10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions

11. Complementary Technologies

DOI: 10.5281/zenodo.7092424

	11.1. For course delivery: YouTube 11.2. For assessment: Lino.
Available Resources	Design Decisions

DOI: 10.5281/zenodo.7092424

2.4.7. Active Participation

Active Participation is the genuine possibility to shape the environment and determine the rules affecting oneself. Active Participation empowers individuals in the activities and relationships of everyday life leading to them living as independently as possible. It helps individuals to gain increased autonomy, self-confidence and self-esteem. Challenges occur in the digital world. Online active participation can take many forms including communication, online communities, as well as equal distribution of power and influence among the various online users.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: T4E, Romania</td><td>Date: September 2020
Version: 1.0</td></tr>
<tr><td>1. Human/Staff
Learning materials development
1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters
1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters
1.3. Technician. 10 working days to design 5 .ppt + audio + video
1.4. Platform Admin. 5 working days to set up the platform for course delivery
Assessment tools development
1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter
1.2. Platform Admin. 5 working days to set up the platform for assessment
Course delivery
1.1 Trainer. Two hours per day/ 5 days per course
1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources
2.1. Word version of learning materials
2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)
2.3. Audio course
2.4. Video materials
2.5. Examples, exercises + case studies for each chapter
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment
3.1. Hardware
• PC
3.2. Software
• Canva for design photos/ slides or videos – Free version available
• OBS Studio for screen recording – Free version available</td></tr>
<tr><td>4. Platform
4.1. A short description for each e-course is visible to users without logging in.</td><td colspan="2">5. General Description
5.1. Title: Active participation
5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).
5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr>
<td rowspan="4">4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td>
<td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: make autonomous decisions, be involved in the decision-making process and enhanced well-being, with increases in self-confidence, self-esteem and self-belief.</td>
</tr>
<tr>
<td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism)
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
• Reflective approach. Teacher is observer
• - Integrative approach. Real-world application</td>
<td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Identify different types of participation in the online and offline environment
• Recognize factors affecting youth participation
• Analyse youth participation within online communities
• Create online interactions that enhance positive reactions
• Evaluate pros and cons during decision making

8.2. Competencies

• Capacity to actively participate in decision-making
• Capacity to participate with respect for others and in a manner that does not contravene human rights and democracy
• Attitudes that encourage better citizenship
• Ability to live independently in the community</td>
</tr>
<tr>
<td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio</td>
<td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td>
</tr>
<tr>
<td colspan="2">11. Complementary Technologies</td>
</tr>
</table>

DOI: 10.5281/zenodo.7092424

	11.1. For course delivery: YouTube 11.2. For assessment: Lino, Kahoot
Available Resources	Design Decisions

DOI: 10.5281/zenodo.7092424

2.4.8. Rights and Responsibilities

Rights, duties and Responsibilities cannot be dissociated from each other. Living as members of society inevitably entails duties and responsibilities as well as rights. The course intends to create a safe and enabling online environment where intermediaries, users and all parties know their rights and responsibilities. Participants will enjoy the benefits of the online environment while minimizing their exposure to risks. The course will empower trainees to protect their digital rights and adhere to their responsibilities in the digital world.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: ALLI, Greece</td><td>Date: September 2020
Version: 1.0:</td></tr>
<tr><td>1. Human/Staff
Learning materials development
1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters
1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters
1.3. Technician. 10 working days to design 5 .ppt + audio + video
1.4. Platform Admin. 5 working days to set up the platform for course delivery
Assessment tools development
1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter
1.2. Platform Admin. 5 working days to set up the platform for assessment
Course delivery
1.1 Trainer. Two hours per day/ 5 days per course
1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources
2.1. Word version of learning materials
2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)
2.3. Audio course
2.4. Video materials
2.5. Examples, exercises + case studies for each chapter
2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment
3.1. Hardware
• PC
3.2. Software
• Canva for design photos/ slides or videos – Free version available
• - OBS Studio for screen recording – Free version available</td></tr>
<tr><td>4. Platform</td><td colspan="2">5. General Description
5.1. Title: Rights and Responsibilities</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr><td rowspan="4">4.1. A short description for each e-course is visible to users without logging in.

4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td><td colspan="2">5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).

5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
<tr><td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: understand how to act responsibly, ethically and legally as participate in the digital world</td></tr>
<tr><td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

- Students use prior knowledge and new experiences to develop new skills (constructivism)

- Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts

- Reflective approach. Teacher is observer

- Integrative approach. Real-world application</td><td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Understand the meaning and the importance of digital rights and responsibilities
• Realize the necessity of respecting digital rights and fulfilling digital responsibilities and obligations
• Identify practices and behaviours which respect digital rights or violate them
• Apply legal and ethical behaviours when studying, working and interacting with others online
• Modify online behaviours according to the newly acquired knowledge of digital rights and responsibilities
• Evaluate alarming online phenomena such as identity thefts and threats

8.2. Competencies

• Capacity to counteract what constitutes a threat to or a violation of digital rights.
• Capacity to take action in cases of violation of digital rights
• Attitudes that encourage better citizenship online
• Ability to protect digital rights</td></tr>
<tr><td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)</td><td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

	• additional resources (in case the learner is interested in reading more) as well as review sections 9.2. Course formats pdf, images, ppt, video and audio	
	11. Complementary Technologies 11.1. For course delivery: YouTube 11.2. For assessment: Lino, Kahoot, Online quiz: https://inside.senecacollege.ca/mylearning/TLP/CopyrightQuiz_FINAL_-_Storyline_output/story_html5.html	
Available Resources	Design Decisions	

DOI: 10.5281/zenodo.7092424

2.4.9. Privacy and Security

Privacy concerns mainly the personal protection of one's own and others' online information, while Security is more related to one's awareness of online actions and behaviour. It encompasses competences like properly managing personal and others' information shared online or dealing with online safety (for example the use of navigation filters, passwords, antivirus and firewall software) in order to avoid dangerous or unpleasant situations. Becoming a digital citizen requires balancing personal empowerment with responsibility for protecting his/her privacy and managing the key IT risks.

<table>
<tr><td>MOOC Canvas</td><td>Designed by: AKO, Germany</td><td>Date: September 2020

Version: 1.0</td></tr>
<tr><td>1. Human/Staff

Learning materials development

1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters

1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters

1.3. Technician. 10 working days to design 5 .ppt + audio + video

1.4. Platform Admin. 5 working days to set up the platform for course delivery

Assessment tools development

1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter

1.2. Platform Admin. 5 working days to set up the platform for assessment

Course delivery

1.1 Trainer. Two hours per day/ 5 days per course

1.2. Facilitator. Two hours per day/ 5 days per course</td><td>2. Intellectual/Teaching resources

2.1. Word version of learning materials

2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text)

2.3. Audio course

2.4. Video materials

2.5. Examples, exercises + case studies for each chapter

2.6. Links for references and other additional intellectual resources.</td><td>3. Equipment

3.1. Hardware

• PC
• Video camera/Smartphone/Tablet
• Lighting Equipment
• Microphone and recording device/Smartphone/Tablet

3.2. Software

• Canva/Pixabay for design photos/ slides or videos – Free version available
• NLE software: DaVinci Resolve (Free version), Adobe Premiere, Vegas, Avid Media Composer, Final Cut (paid versions)
• Audio software: Audacity (free version), Adobe Audition, Logic Pro, Cubase (paid versions)
• OBS Studio for screen recording – Free version available
• - Libre Office (free version)</td></tr>
<tr><td>4. Platform

4.1. A short description for each e-course is visible to users without logging in.</td><td colspan="2">5. General Description

5.1. Title: Privacy and Security

5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).

5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.</td></tr>
</table>

DOI: 10.5281/zenodo.7092424

<table>
<tr>
<td rowspan="3">4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.</td>
<td colspan="2">6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: be prepared for security-related dangers when being online; willing to protect your own content; be knowledgeable about online rights to protect oneself from repercussions</td>
</tr>
<tr>
<td>7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

• Students use prior knowledge and new experiences to develop new skills (constructivism)
• Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
• Reflective approach. Teacher is observer
• Integrative approach. Real-world application</td>
<td>8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

• Recognise current data protection regulations
• Protect his/her personal information online
• Protect the personal information of other users
• Apply security measures to his/her devices, accounts and online interactions
• Analyse his/her own data and security-related online behaviour and its consequences
• Establish privacy and security guidelines for his/her own use
• Recommend his/her guidelines to his/her surroundings

8.2. Competencies

• Capacity to understand current data protection regulations
• Ability to secure private information in an online environment
• Ability to secure devices from safety-related risks
• Attitude that promotes conscious and responsible online behaviours and interactions</td>
</tr>
<tr>
<td>9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

• short overview introducing the expected learning outcomes
• text and images
• exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)
• additional resources (in case the learner is interested in reading more) as well as review sections

9.2. Course formats pdf, images, ppt, video and audio</td>
<td>10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions</td>
</tr>
</table>

DOI: 10.5281/zenodo.7092424

	11. Complementary Technologies 11.1. For course delivery: YouTube 11.2. For assessment: Lino.
Available Resources	Design Decisions

DOI: 10.5281/zenodo.7092424

2.4.10. Consumer Awareness

The internet, with all its dimensions like social media or other virtual social spaces, includes environments where often the fact of being digital citizens means also being a user, being a consumer. Understanding the dimensions connected to this issue is one of the competences that future individuals need to have if they want to move into these digital environments. In a consumer-driven economy, the very act of consuming goods and services is a form of democratic participation, a form of vote. Buying a certain product or service is not only a selfish, individual decision but formal support for a company, its business model, business practices, production strategy, etc. Given the growing role of the private sector in our economic and political lives, democracy cannot only be exercised via the ballot box.

MOOC Canvas	Designed by: ALLI, Greece	Date: September 2020 Version: 1.0
1. Human/Staff Learning materials development 1.1. Trainer. 10-12 working days to prepare the word version (30-35 pages) = 5 chapters 1.2. Facilitator. 10-12 working days to prepare exercises, case studies (15-20 pages) for 5 chapters 1.3. Technician. 10 working days to design 5 .ppt + audio + video 1.4. Platform Admin. 5 working days to set up the platform for course delivery Assessment tools development 1.1. Trainer and Facilitator. About 10-12 working days to prepare the assessment tools for each chapter 1.2. Platform Admin. 5 working days to set up the platform for assessment Course delivery 1.1 Trainer. Two hours per day/ 5 days per course 1.2. Facilitator. Two hours per day/ 5 days per course	**2. Intellectual/Teaching resources** 2.1. Word version of learning materials 2.2. Editable Powerpoint presentations for each chapter (each slide includes pictures, graphics and text) 2.3. Audio course 2.4. Video materials 2.5. Examples, exercises + case studies for each chapter 2.6. Links for references and other additional intellectual resources.	**3. Equipment** 3.1. Hardware • PC • Video camera/Smartphone/Tablet • Lighting Equipment • Microphone and recording device/Smartphone/Tablet 3.2. Software • Canva/Pixabay for design photos/ slides or videos – Free version available • NLE software: DaVinci Resolve (Free version), Adobe Premiere, Vegas, Avid Media Composer, Final Cut (paid versions) • Audio software: Audacity (free version), Adobe Audition, Logic Pro, Cubase (paid versions) • OBS Studio for screen recording – Free version available • Libre Office (free version)

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4. Platform

4.1. A short description for each e-course is visible to users without logging in.

4.2. Course content in various formats: word files, embedded text and PPT, pictures, video, case studies.

4.3. Assessment: various types of questions, essays and peer review workshops selected from Moodle database.

4.4. Forum, Chat and BigBlueButton for conferencing.

5. General Description

5.1. Title: Consumer Awareness

5.2. Five-day course. Each day comprises learning (one chapter) and assignment (individual or group tasks).

5.3. A short paragraph to introduce (50-80 words) the learning goal and state the aim of the e-course.

6. Target Learners

6.1. Age: 12-23 years

6.2. Language: English | Romanian | German | Greek

6.3. Background: secondary school/ high school/ faculty

6.4. Motivation: youth who want to navigate safely in nowadays digital environments, especially since these dimensions are connected to digital citizenship and democratic participation

7. Pedagogical Approaches

7.1. Learner-centred pedagogy.

- Students use prior knowledge and new experiences to develop new skills (constructivism)
- Teachers create the educational context and facilitate the learning process, guiding students as they learn new concepts
- Reflective approach. Teacher is observer
- - Integrative approach. Real-world application

8. Objectives and Competences

8.1. Course objectives

At the end of this module, learners will be able to:

- Identify commercial persuasion
- Recognize practices and behaviours which mislead and manipulate consumers online, including targeted advertising
- Assess their own practices when using digital media and technologies to consume products or services
- Apply relevant rules, legislations and regulations when buying or selling products online
- Evaluate the accuracy, perspective and validity of digital advertising

8.2. Competencies

- Capacity to interpret, analyse and critically evaluate commercial messages
- Capacity to protect against exploitation when making online purchases
- Attitude to protect personal information when buying online
- Ability to apply security measures when shopping online

9. Learning Contents

9.1. Structure: sections (5 chapters). Each section comprises:

- short overview introducing the expected learning outcomes
- text and images
- exercises, case studies, real-life scenarios (examples to illustrate the application of skills being learned)

10. Assessment Activities

10.1. Formative assessment tools for each chapter: peer evaluation, feedback during workshops, case study, comments.

10.2. Summative assessment tools: quiz, questionnaire, matching questions

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	• additional resources (in case the learner is interested in reading more) as well as review sections 9.2. Course formats pdf, images, ppt, video and audio	
	11. Complementary Technologies 11.1. For course delivery: YouTube, https://www.youtube.com/watch?v=-T3vWwQEPL4&t=434s&ab_channel=IkenEdu 11.2. For assessment: Lino, Kahoot	
Available Resources	Design Decisions	

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3. Instructional design

3.1. Instructional design concept

The process of developing stimulating and meaningful learning environments for learners is the art of instructional design. First, in online education, this notion of instructional design arose as "a must". Its benefits and structured approach made it relevant in face-to-face classes with great success. You can find tips here to enhance the way you teach, even if you are an instructor, mentor or youth worker experienced in offline education.

The key steps for developing an Instructional Design Project for an online course are discussed in this chapter, including:

- Exploring the principles of effective instructional design relevant to online learning.
- Applying the instructional design process to design and develop a learning program.
- Building your own instructional design project, ideally for use in your teaching in the real world.
- Designing and creating sessions planned for engaging learning experiences.

We have concluded this chapter as a way for your students to gain meaningful learning experiences. Let's get started.

Keep the important questions for your course in mind. Furthermore, to make the learning journey unforgettable, be persuaded that the content structure is important. Thereafter, write down the big ideas. Put them down, even though you don't have all the answers or you're not fully happy with them. This will not be apparent to the students. Instead, it lets you customize the learning path.

What do you want your students to remember and learn to do within days, weeks, or months from now?	• In a number of days • Weeks • Months
How will this be of lasting benefit to students outside the classroom?	• Real-life situations • Daily tasks • Regular activities
What should learners understand about the subject?	• Importance • Necessity
At the end of the lesson, what primary knowledge and skills can students acquire?	• Key knowledge • Skills

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3.2. The 5E Model

The 5E Model (LesleyUniversity, 2020) is based on the **constructivist theory** of learning, which means that interactions generate awareness and meaning for individuals. Learners are able to align new knowledge with previous ideas by knowing and reflecting on activities. "*Educational movements, such as inquiry-based learning, active learning, experiential learning, discovery learning and knowledge building, are variations of constructivism*", according to the subject matter expert (Jobrack, 2013).

This constructivism allows educators to develop their educational approach into inquiry, discovery and evaluation. This ensures that the instructor plays the role of a facilitator in many respects, directing students as they learn new concepts (PC, 2020).

The following is a summary of the 5E Model's five stages.

1E

Engage

The instructor works in the first step of the learning cycle to gain an **understanding of the previous experience of the students** and recognizes any knowledge gaps. Fostering an interest in the upcoming topics is also critical so that students are ready to learn.

Teachers may assign students to open questions or write down what they already know about the subject. This is also when the notion is presented for the first time to learners.

Bloom's taxonomy: Knowledge

Activity ideas

- Discuss
- Short games
- Pictures
- Videos
- Real-world problem
- Notice and wonder

Tools

- Padlet/ Lino/ Wakelet
- Quiz
- Mentimeter
- Forum
- Know-Want-Learned chart

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2E

Explore

Students consciously **explore the new concept** during the discovery process through concrete learning experiences. They may be asked to go through the scientific method and collaborate and make observations with their peers.

This stage enables learners to learn in a hands-on way.

Bloom's taxonomy: Comprehension and application

Activity ideas

- Brainstorming
- Watch video
- Read articles
- Research
- Cooperative learning tasks
- Task using manipulative hands-on
- Investigation

Tools

- Google search
- YouTube
- Moodle course
- Online forum discussions

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3E

Explain

This is a process led by teachers that **allows students to synthesize new knowledge and ask questions** if more clarity is needed. Teachers should ask students to share what they learned during the Explore process in order for the Explain phase to be successful before presenting technical knowledge in a more direct way.

This is often when educators use video materials, applications for computers, or other aids to improve comprehension.

Bloom's taxonomy: Analysis

Activity ideas

- Video lessons: instruction, modelling, scaffolding
- Vocabulary
- Notes created by students
- Explanatory videos

Tools

- Think aloud
- Jigsaw collaborative method
- Moodle forum
- Flipgrid

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4E

Elaborate

The 5E Model's elaboration process focuses on giving students room to **apply what they have learned**. It enables them to develop a deeper understanding. To strengthen new skills, teachers can ask students to **build presentations or perform additional investigations**.

Before evaluation, this stage helps students to consolidate their skills.

Bloom's taxonomy: Synthesis/ Creation

Activity ideas

- Problem-solving tasks
- Investigation
- Real-world tasks
- Independent practice
- Game
- Design concept to practice the skills

Tools

- Quiz
- Storyboard
- Kahoot

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5E

Evaluate

The 5E Model enables both formal and informal evaluation. Teachers will **observe their students** during this process to see if they have a full mastery of the core concepts. It is also helpful to note when students, based on what they studied, tackle problems in a particular way.

Self-assessment, peer-assessment, writing assignments and tests are other beneficial components of the evaluation process.

Bloom's taxonomy: Evaluation

Activity ideas

- Journal tasks
- Worksheet
- Quiz
- Exit task
- Problem-solving and critical thinking task

Tools

- Quiz
- Submission document
- Essay

Source: adapted from (TheBestTeacher, 2020) and (Tucker, 2020)

When learners first experience new concepts, the 5E Model is most successful because there is an opportunity for a full learning cycle. Full effectiveness is achieved in a two to three-week unit in which one or more distinct lessons are focused on each process (Bybee, 2014). If used for a single lesson, the effectiveness of the individual phases can decrease as a result of shortening the time and opportunities for concepts and abilities to be challenged and restructured. If too much time is spent on each level, the framework is not as effective because the students will forget what they have learned.

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3.3. First principles of instruction

Merrill opens his book First Principles of Instruction by describing a principle as "*a relationship that, regardless of the methods or models used to implement this principle, is always true under appropriate conditions*" (Merrill, 2012). His principles "*can be implemented in any delivery system or using any instructional architecture*" and focus on learning activities.

1

Problem-Centred

learners deal with real-life issues

Learners acquire knowledge and skill in the context of real-world problems or tasks

For Merrill, the problem-centred principle is the basic underlying premise. He promotes an approach that contextualizes instruction based on assignments in the real world.

Merrill contends that:

- When people are interested in solving problems and creating knowledge, they learn more easily than when they are confronted with the information they are expected to memorize.

For Merrill, therefore, the primary objective of any learning piece, module or program should be to help learners develop the skills required to solve real-world problems. This method varies significantly from topic-centred learning in which elements of the assignment are taught in isolation.

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2

Activation

prior knowledge of learners is used to activate new knowledge

Learners recall or apply existing knowledge and skill as a foundation for new skills

Merrill's opinion is that teaching too often begins with high-level, abstract representations that have insufficient prior understanding for learners. As a result, they have to use their associative information (memory used to connect ideas to other ideas) with the result that they are at risk of easily forgetting because the rich structure that enables the retrieval of long-term memory awareness is missing in associative memory. Activation includes learning experiences that promote the creation of mental models and structures that can allow learners to integrate new information or skills into their established knowledge.

Mental models. Mental models (representations of how the world operates) are important for Merrill because they allow learners to gain more interconnected information that can assist with retrieval. Without previous knowledge activation or the use of scaffolding constructs, learners have to memorize the subject because they lack the experience-based mental models required to organize and incorporate the new knowledge being taught.

The first stage of learning, therefore, is to enable the prior knowledge of learners so that it can be used as a basis for new knowledge. The first stage of learning for learners, without applicable prior experience, should be to create a framework to help them organize new knowledge.

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3

Demonstration

new knowledge is shown to learners

Learners observe a demonstration of the knowledge and skill to be learned

Demonstrations include examples and simulations of the ideas being taught. For Merrill, there are two levels of knowledge:

- Information (generic and abstract) - Information applies to several instances or circumstances and is universal and inclusive.
- Portrayal (specific) - The portrayals apply to a particular case or a single circumstance and are specific and limited.

The view of Merrill is that instruction is much more productive when it also requires the portrayal level in order to illustrate the data across particular circumstances or cases. He also notes that one example is not adequate, that many examples are necessary and that care must be taken to ensure that the examples are relevant. Several examples assist learners with the 'transfer' (applying the new information or skill in new situations).

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4

Application

new knowledge or skills are used to solve a problem

Learners use their newly acquired knowledge and skill to solve new problems or carry out tasks

The application of knowledge and skills as a required condition for successful learning is supported by most educational design theories. The importance of solving problems or carrying out real-world tasks is emphasized by many learning models.

For Merrill, answering multiple-choice, short-answer, or matching questions, which only require learners to remember what they read or what they heard in a lecture, is not an application of knowledge. He defines two types of application as being important:

- Requiring learners to identify new divergent examples of an object or case. This type of application is also necessary for learners to perform procedural tasks requiring them to recognize the step correctly conducted and to recognize the consequences resulting from executing the step.
- Requiring learners to carry out or complete the steps of a procedure.

Example of these two types of application: a scenario-based learning activity where the learner must first define a problem or situation and then make a judgment, take a decision or take corrective action.

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5

Integration

learners use new knowledge or skills in their real-life

Learners reflect on, discuss and defend their newly acquired skill or integrate the skill into a real-world activity

Learning includes the adjustment of current mental models and the incorporation of new knowledge and skills with knowledge and skills that have already been learned.

Merrill claims that well-designed teaching offers opportunities for learners to:

- Use your new knowledge or expertise by applying it to a task or problem
- Think about and analyse what they have learned to revise, synthesize, recombine and change their new knowledge or skills.

Learners can do so in two ways:

- Peer collaboration: Learning designers can develop peer collaboration activities that enable learners to work together within teams to perform a task or solve a problem. Team-based learning activities need to be structured to include opportunities for learners to explore and reflect on their newly learned knowledge and skills.
- Peer Critique: Peer Critique practices should be structured to give learners the opportunity to analyse each other's work constructively and objectively. These exercises can provide opportunities for learners to express their newly gained expertise and to demonstrate the application of their skills.

In Merrill's view, peer collaboration and peer critique practices make information retention and effective execution of tasks and challenges more possible. This use of dialogue, debate, cooperation, criticism and reflection is an important part of the concept of social constructivism.

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3.4. ADDIE instructional design

ADDIE is a framework developed for designing education and training programs. ADDIE stands for Analyse, Design, Develop, Implement and Evaluate (Gutierrez, 2018). However, this sequence does not enforce a strictly linear progression through the steps.

A **Analysis**	The Analysis phase focuses on the target audience: • To understand whether the curriculum fits the level of ability and intelligence shown by each student/participant • To ensure that what they already know is not duplicated Instructors differentiate between what students already know and what they may know after finishing the course.
D **Design**	This stage sets out all the priorities, methods to be used, different assessments, review of the subject matter, preparation and resources. The focus is on: • Learning objectives, content, subject matter analysis, • Exercise, lesson planning and assessment tools used • Selection of media.
D **Development**	The development process begins with the production and testing of the methodology. At this stage, designers: • Use the data gathered from the two previous stages to create a curriculum that will convey what needs to be taught to participants. If the two previous phases involved preparation and brainstorming, the production stage is all about bringing this into motion. This process involves three activities, namely drafting, production and evaluation.
I **Implementation**	This stage represents the constant adjustment of the program to ensure that maximum efficiency is achieved. Implementation includes: • Redesign, update and edit the course in order to ensure that it can be delivered effectively • Designers and students lead the course so that the design can be continually tested for further development. • Feedback from course designers and participants.
E **Evaluation**	This is the point at which the project is subjected to meticulous final testing as to what, how, why and when of the tasks that have been (or have not been) achieved in the whole project. This phase can be divided into two parts: • Formative (during the study) • Summative (at the end) In reality, the initial assessment takes place during the development stage. The main purpose of the evaluation process is to decide if the objectives have been met and to determine what would be appropriate to ensure the progress of the project.

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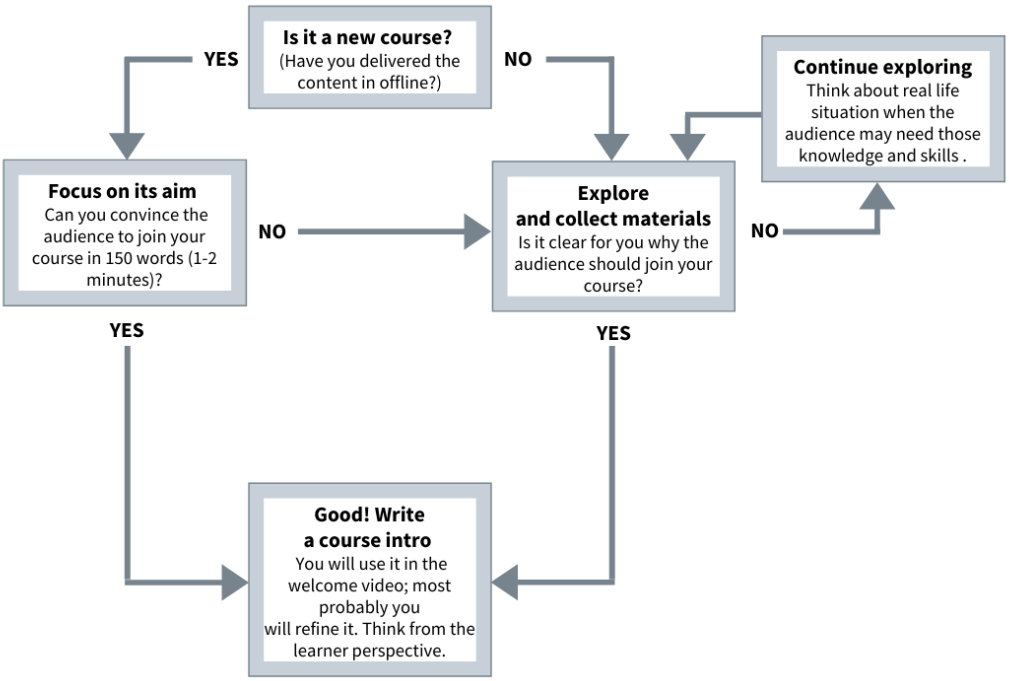
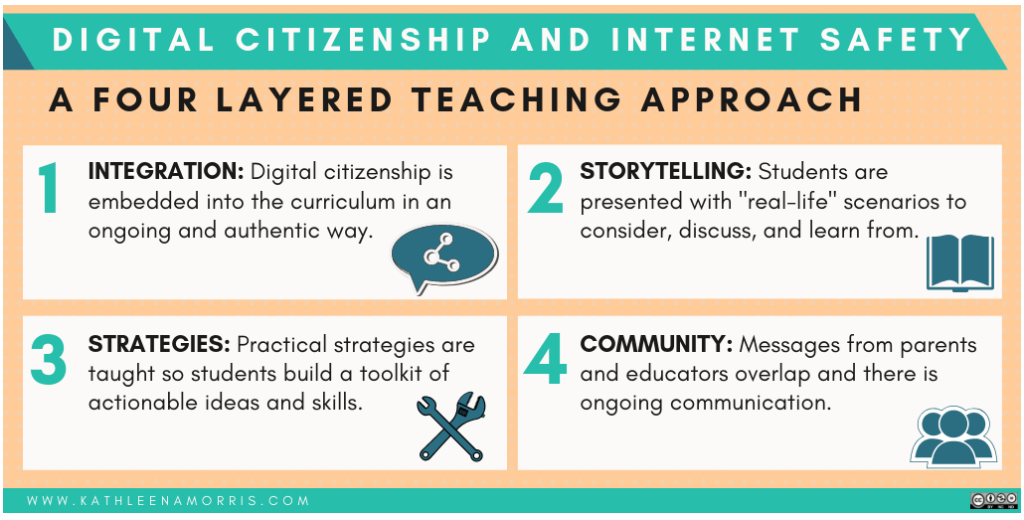
3.5. A step-by-step guide

Are you ready? Your readiness depends on your level of knowledge on the subject. Make sure you know enough about the material. Then try writing a course intro to persuade your audience to join your online courses.



You may think that this welcome video should stay at the end because then you'll know what to say. You are right. But we need to think about it from the very beginning. This will help us understand that good classes are not about producing content, they are about reacting to the needs of the audience.

Teaching youth about Digital citizenship is a complex task and needs a four-layered teaching approach (Morris, 2018).



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3.5.1. Why a welcome video?

You immediately capture the attention of learners through a format that attracts viewers when you construct a course introduction using video. Although making an introduction video takes more time than a text-based version, the investment is well worth it.

Your video intro can be classic or innovative. Below are two examples that will give you the self-confidence that you can do it.

Classic (OSU, 2020)	**Innovative**
"Welcome to the course! My name is [your name] and I will be your instructor for the course [course name]. *(One sentence about you: brief biography, certifications and years of teaching experience.)* The purpose of this course is to provide you [purpose and major learning objectives]. This course is designed as an online course, which means that you will be responsible for [describe participation and interaction requirements]. This course requires that you already have [knowledge required] and are able to manage [work-load expectations]. The things that I feel are most important for you to recognize in this course are [most important tips for success in this course]. During this course, you will need to [explain here]. (*If you are requiring your students to make videos or create something detailed here.*) The work for this course is organized by weeks [topics]. Click on the week module folder to view all of the work for that week. Also, it is important for everyone in the class to get to know each other – and to start building connections early. Please go into the forum area under "Class Introductions" and then post a new message using your name as the Subject Line and then share some information about yourself. If you need a sample, take a look at my introduction, where you can learn some more about my interests and hobbies as well as my own goals for this course. If you have any questions or concerns during the course, please know that I want to see you succeed. The preferred method for sharing your concerns and questions is to [list how students should contact instructors and what information to include]. I hope that you will enjoy this course and I look forward to having you in the class."	**Be creative!** Remember that for all students, your introduction video will humanize the online experience! Help them understand that their teacher is a real individual with a passion for the subject matter. **Advices:** - Short and concise is best. - Make eye contact with your audience by looking into the camera or webcam. - Don't concentrate on the script or watch yourself in the computer. - Make your videos no longer than 2 minutes. **Main steps:** 1. Introduce yourself 2. Introduce the course (title, sequence, context, prerequisites) 3. Tell students what they will be able to do by the end of the course (i.e., skills attained) 4. Tell students how to contact you and your response time 5. Encourage students to communicate with you and/or explain how to start work on the course 6. Close on a positive note!

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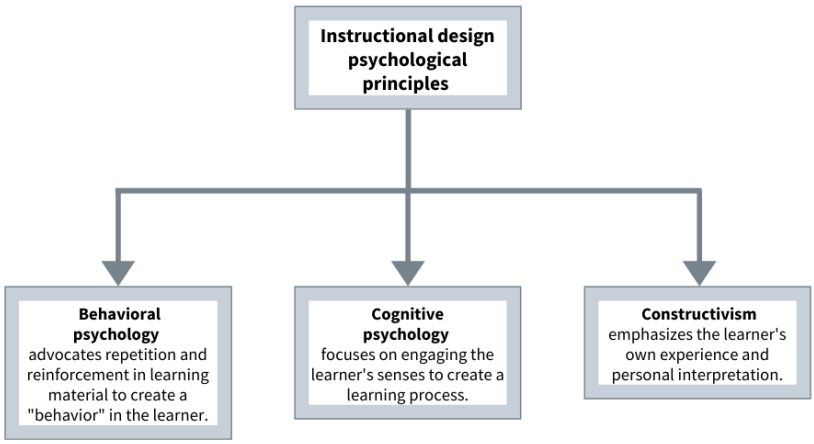
3.5.2. Instructional design principles

Three psychological concepts of learning are the foundation of instructional design: behavioural, cognitive and constructivist.



3.5.3. Choose the teaching method

It is not an easy task to pick a teaching method. In order to contribute most efficiently to learning, methods need to be carefully selected. To improve student learning, the following section outlines several approaches that can be used and integrated during online learning.

Direct instruction	This technique, often identified as the "traditional" way of teaching, does not provide much interaction and involvement. Teachers express information mainly through lectures and scripted lesson plans to their students, without taking into account student interests or hands-on or other forms of learning opportunities.
Inquiry learning	Learning is driven by questions, concerns, or problems that are discussed by students. The teacher discusses a subject or concept and shares on that topic some of his/her thought and understanding. Students often build problems and take a great deal of responsibility for how to answer them. The teacher directs the students to build ties between the subject and what the students already know. **Guide** Guidance can be driven by questions such as: What do you think about …? How do you know …?

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Tell me your thoughts about …?

Cooperative

Cooperative learning requires learners to collaborate to achieve common goals together. They learn to listen to what others have to say, give and receive assistance, reconcile disagreements and democratically solve problems. Putting students in small groups and asking them to work together, however, does not mean that they can work cooperatively. To ensure that members function interdependently, groups need to be structured.

Guide

The instructor will organize the groups, including the size and composition of the type of task set; set student behaviour expectations; roles for individuals and groups, and track the process and performance.

Flipped classroom

This approach explains the structure of teaching that has students watching pre-recorded lessons at home and doing in-class assignments, as opposed to listening to classroom lectures and doing homework. Teachers who adopt the concept of the flipped classroom frequently film their own educational videos, but many use pre-made videos from online outlets as well. A main advantage of the flipped classroom model is that it encourages learners to work at their own pace.

Game-based

It comes from the need to construct engaging learning. Games are a great way to foster a "mastery" mindset, rather than an emphasis on grades since they require students to be problem solvers and use soft skills that they would need as adults. Students reach a particular purpose (learning goal) in a game-based learning environment by choosing actions and experimenting along the way.

Guide

When learners make some improvements, they will win badges and experience points much like they would in their favourite video games.

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Peer teaching	Provides opportunities for learners to regularly share their expertise and skills with peers and/or serve as teachers and mentors. Using this approach, an opportunity is deliberately given to inspire learners to teach other students/community members. **Guide** Jigsaw method
Case studies	Case studies are a detailed overview of actual events from real scenarios that students use to discuss topics in an authentic context. This is a participatory, discussion-based way of learning in which students develop expertise in critical thinking, communication and group dynamics.
Community-based learning	CBL refers to strategies used by educators to connect what is learned to their neighbouring communities (local institutions, history, literature, cultural heritage and natural environments). It is founded on the idea that all cultures have inherent educational resources and resources that can be used by educators to strengthen student learning experiences.
Assessment & Evaluation	Tools are provided to help learners and trainers collect formative and summative data on the learning and success of students. **Guide** These tools may include reflection questions, checklists, rubrics, 3.2.1 method (3 things learned, 2 interesting things that they'd like to learn more about, 1 question they still have about the material).

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3.5.4. Create efficient and effective courses in 9 steps

Consider the **background**. Look at the learners' backgrounds to develop materials that challenge them without overwhelming them. This will help you build new knowledge on the foundation of existing knowledge.

Present **content**. Organize the material in a logical sequence that makes sense. Point out how the new material relates to the old; how it points to what is coming in later lessons. Use outlines, tables, infographics and visual elements to organize hierarchical structures and illustrate relationships among various components of the material.

Include **supplementary** material. While designing the learning materials think about mast know, should know and nice to know. With this in mind offer supplementary materials for those learners whose backgrounds or abilities allow them to learn more quickly than the rest of the class.

Guide the learner in practice. Help them contextualize information using examples, real-life situations and various formats (video, audio, text as appropriate). When you create a course section in which you present the steps to do a task, do not just ask them to memorize the steps. Guide them to practice the skill as you teach it. Explain to them that it is OK to mess up, at least at first.

Provide for **independent practice**. Learners need many hours of practice in a skill to achieve expertise. Thus, an instructional program should teach efficiently, encouraging learners to practice. Give them the chance and place (e.g., exercises, case study) in which they can begin to put their knowledge into practice.

Encourage **teamwork**. When they will get a job, your learners most probably will need to function as a part of a team. Prepare them for this step. Encourage online chat. Give them the opportunity to connect with other students, give feedback, be evaluated, present their ideas with confidence and apply their knowledge as a part of the team.

Allow **creativity**. Within the lesson structure, include opportunities for students to produce original content. This meant to discuss, look for contradictions, give explanations and resolutions, participate in debates and bring arguments, to think outside the box. Incorporate critical thinking exercises.

Assess how well the learner is doing. Teaching large amounts of information and assessing the achievements at the end is the worst in the education process. Smaller, less-formal evaluations, such as demonstrations, or quizzes at the end of each topic work much better than testing students at the end of the course. While assessing, provide feedback for learners to understand what was good in their learning strategy and identify the points where he/she went off the right track.

Provide **feedback**. Students learn better from feedback soon after the assessment, while the work is still fresh on their minds. Immediate feedback fosters reflection, correction and performance extension. In addition, it increases student motivation as they feel the instructor is interested in their success.

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3.5.5. Instructional design review checklist

Every eLearning course requires a reliable evaluation tool that will accurately and objectively assess its efficiency and comprehensiveness. It is also intended to assist developers and instructors to fine-tune it and make it more powerful and concise, if necessary. This tool is a checklist to enable reviewers to easily assess the eLearning course quality and efficiency.

No	Criteria	Yes	No
	1. Objectives		
1.1	Are objectives stated clearly for the learner?		
1.2	Are the course requirements consistent with the objectives?		
1.3	Do chapters/topics thoroughly cover the course's objectives?		
1.4	Do the learning objectives match the learning outcomes?		
1.5	Does the overall content and structure of the course meet its instructional objectives?		
	2. Structure		
2.1	Does the course have a concise and comprehensive overview or syllabus?		
2.2	Does the course include examples, analogies, case studies, simulations, graphical representations and interactive questions?		
2.3	Does the course structure use appropriate methods and procedures to measure student mastery?		
	3. Content		
3.1	Does the content flow seamlessly, without grammatical, syntactical and typing errors?		
3.2	Is the content up-to-date?		
3.3	Is the content aligned with the curriculum?		
3.4	Are the desirable outcomes incorporated into the content?		
3.5	Is the content in compliance with copyright laws and all its quoted material cited correctly?		
3.6	Does the course engage students in critical and abstract thinking?		
3.7	Does the course have prerequisites or require a technical background?		
	4. Assessment		
4.1	Are the assignments relevant, efficient and engage students in a variety of performance types and activities?		
4.2	Are practice and assessment questions interactive?		
4.3	Do the practice and assessment tasks focus on the course's objectives?		
	5. Technology - Design		
5.1	Is the design clear and consistent, with appropriate directions?		
5.2	Are the images and graphics of high quality and suitable for the course?		
5.3	Is the course easy to navigate and offers assistance with technical and course management?		
5.4	Is the course navigation structure consistent and reliable?		
5.5	Are the course hardware and software well defined?		
5.6	Is the audio and on-screen text in sync?		
5.7	Does the course architecture allow instructors to add content, activities and extra assessments?		

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Conclusions

The DIGCIT project, conducted by a consortium of four youth associations, aims at encouraging digital citizenship among young people and creating an innovative learning environment for learning it. Together with more than 20 associate partners, the multidisciplinary alliance improves the pedagogical skills of youth workers, develops civic competences and increases awareness of young people and youth workers about digital citizenship.

Growing up has never been simple, regardless of the age group someone belongs to, but nowadays, with such widespread access to digital technology, the lifestyle has taken on a whole new meaning. Digitalisation is unfeasible to separate it from citizenship, being an essential component of our contemporary world. The most practical way to teach digital citizenship is to treat it as a collection of knowledge, attitudes and skills that people need to successfully handle significant difficulties in their on- and offline lives.

The current manual is the result of a deep study which responds to a fundamental question: how to design a digital citizenship MOOC in order to equip participants with the necessary competences. To do that, the DIGCIT project partners delved into primary and secondary research. The research was then used to develop digital citizenship MOOC Canvases. These canvases were then supplemented by elements of instructional design which help developing stimulating and meaningful learning environments for digital citizenship learners. The main conclusions drawn following the above workflow are included below.

The digital citizenship domain is a complex and challenging field. The young people's awareness regarding its risks and the skills necessary to become good digital citizens are highly required by students and needed by local communities and European countries.

The MOOCs have been expanding over the last couple of years and proved useful during the Covid-19 pandemic. However, there are several challenges associated with MOOC learning, which need to be addressed by educators.

One of the most important challenges associated with the use of MOOCs is the design of the MOOC. Many of the existing MOOCs lack engagement, which leads to low completion rates. To improve these, course designers need to come up with new MOOC design concepts.

Enrolling in online courses has been expanding in the last period of time due to the Covid-19 pandemic and it is still encountering a series of problems. One of them is to respond to students' styles of learning and become accessible for everyone no matter the place, the gadget or the internet connection. Some people are more visual, others auditory or kinaesthetic; some are activists, theorists, reflectors or pragmatists. How to design a course to offer a meaningful and fruitful learning opportunity for all is a major challenge which must be addressed in order to improve course completion rates.

Another challenge is related to the digital skills of course designers, course managers and students. Simply having access credentials as a manager, teacher or learner does not guarantee that these will know how to register, enrol and carry out the activities required for their respective roles.

The availability of the internet connection and laptop/tablet/mobile devices could also influence the access and experience of users attending MOOCs. While course designers could not influence these

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directly, they may be able to keep these in mind from the early design stages, so that the courses could be followed from multiple devices and with intermittent or poor internet connection.

Moreover, results also provide a basis for creating the curriculum of the course concluding trainees' requirements such as evaluation preferences. While most prefer multiple choice questions, for those who want to test and improve understanding, analytical skills and the ability to synthesize and create new things, the assessment could be problematic and may require multiple evaluation opportunities along the way. Peer assessments may be an alternative in MOOC format.

From the primary research carried out, the research team also concluded that most young people are interested to learn something new and developing their skills, rather than solving problems. This need to be considered while designing and managing online courses in MOOC format.

Considering the current information overload on the internet, the most important factor besides cost when deciding whether to follow an online course or not, is the course quality. Apparently, young people nowadays do not just want certification, but good quality information and learning experience.

The research results lay the foundation for creating 10 online courses to help young people build their digital citizenship:

1. Access and inclusion;
2. Learning and Creativity;
3. Media and Information Literacy;
4. Ethics and Empathy;
5. Health and Wellbeing;
6. e-Presence and Communication;
7. Active Participation
8. Rights and Responsibilities;
9. Privacy and Security; and
10. Consumer Awareness.

Nevertheless, the research team developed ten specific MOOC Canvases for supporting educators with a framework and helping them visualize the mandatory design of the course.

Moreover, the manual provides additional information about pedagogical approaches that provide a framework to discover a solid foundation for learning and help trainees to attain their greatest potential. The objective is to support students as they expand on their past knowledge and form new skills and attitudes. Making learning accessible to the learner is the aim of instructional design. The goal for educators is to provide the content in a way that is pertinent to the needs of the trainees. Examples of instructional models and principles are broadly explained step by step.

Finally, this research emphasises the importance of digital citizenship in a world where technology escalates. Through youth work, this initiative seeks to encourage digital citizenship. As a result, we have created cutting-edge pedagogies and methodologies for instruction, learning and evaluation that enable trainers and students to use digital technology in original, efficient and collaborative ways. In the end, this is followed up by designing a Massive Open Online Courses (MOOC) with free educational resources for digital domains essential in today's digital world.

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Recommendations

The current paper should be regarded as a research effort with direct applicability. The applicability refers to the further development of digital citizenship course materials and online learning system within the DIGCIT project, but also the development of similar courses in similar or related topics. The recommendations set out below are relevant in both cases.

Firstly, the purpose of every course should be to achieve its objectives, i.e. to develop the set of competences it intends to. In order to achieve that, courses need to be accessible free of charge to all those who intend to attend them. The Creative Commons CC BY license is the most accommodating of licenses offered. This license lets others distribute, remix, adapt and build upon existing work, even commercially, as long as they credit the authors for the original creation. This is recommended for maximum dissemination and use of licensed materials, which is the case of the DIGCIT project.

The preliminary research carried out in the DIGCIT project indicated that, even though the online courses gain more and more participants every year, the course completion rates are still low. That brought to the attention of the research team the need of creating courses that bring people in, but also keep them motivated and engaged so that they actually complete these courses. Following this lead, the research also investigated the main benefits that are appreciated by course participants. As the research shows, these include the quality of the course materials, their attractivity and interactivity, and the provisions for recognition and flexibility to suit different learning styles.

According to the results, the quality of the course materials relates to the topics addressed, the content itself, the forms in which the content is presented and its availability in native languages, to name just a few.

The attractivity of courses is related to many factors, including the ratio between text, images and audio-video materials, for example. This becomes increasingly important while working with youth, a category of people born with internet and social media platforms around them. At the same time, the interactivity could be translated into case studies, forum questions, peer-reviews, etc.

While considering the above, the authors recognise that the attractivity and effectiveness of courses are subjective and may differ from one individual to another. However, as we explained in the current manual, patterns exist in the form of different learning styles. Since addressing the needs of each individual is not practicable in the MOOC format, the course design may at least consider the different learning styles of people. Moreover, young people may not even be aware of their learning styles and therefore helping course participants to find out what their learning style is and what that could mean in terms of following course materials may help improve course completion rates and course participants' attained skills.

One of the key benefits of online courses is the recognition for the competences attained. Therefore, even if the course materials are freely available, the online learning system should be designed such that to provide such recognition to the course attendants. This entails that the online platform shall provide a form of registration with user name, email address, first and last name. Moreover, the recognition may take the form of a course certificate and/or badges.

In addition to the recognition of competences previously discussed, it is essential that digital citizenship courses provide means of assessing those competences. In the MOOC context, that could

mean assessment quizzes. For longer courses, these quizzes should be scaled at the module level, such that to offer intermediate means of verifying one's learning.

Finally, based on its complexity and its importance, the main subject of this research can be further investigated. The current research may represent a starting point for further studies which could prove quite beneficial to the literature:

- Methods for increasing digital citizenship awareness among youth through formal and non-formal education
- Digital citizenship for other categories of people, such as elderly
- Promoting digital citizenship through associations
- Investigating rights and duties for digital citizenship from a legal perspective
- Internet safety and privacy for children who use devices with such a connection.

Transferability

Research methodology

The specific procedures or techniques used to identify, select, process and analyse information about this specific topic can be transferred to any qualitative research. The methodology used for primary and secondary research flows in a way suitable for any other research, no matter its topic.

Intellectual output content

The content of the ten courses can easily become teaching content. The ten courses about digital citizenship can be transferred into formal education with the valences of non-formal education. The teachers themselves have the possibility to adapt the information found in the course materials to their lessons, depending on their students' needs. The information can be transferred and adapted at different levels in order to supplement the curricula.

Workshop

In addition to intellectual content, the courses provide ideas for activities too. Each chapter is accompanied by workshop activities in order to fix the knowledge and boost skills. These activities can be transferred and used by teachers, youth workers, other organisations or anyone interested in this topic.

MOOC platform

All the courses have been integrated into the MOOC platform and they can be accessed via an Internet connection. Each online course attractively provides the content and the assessment to verify the knowledge. Gamification is one of the key concepts of online courses due to their format. Also, the courses have a PDF version too, so once they are saved, they can be accessed without the internet and printed.

MOOC Canvas

The ten MOOC Canvases that have been created to describe and design MOOCs can be used by any youth organization in order to create attractive courses. Also, these can be used by youth workers to improve their courses and increase youth engagement. In addition, the framework used to create the ten courses can be used as an example to create any other courses about any topic.

Instructional design models

This manual provides a series of pedagogical approaches in order to facilitate learning. The instructional models that are presented here can be adapted to any instructive educational activities, by any educational staff, representing one of the main principles of teaching.

Outputs for our everyday life

The output of this research aims to produce learning, meaning to change attitudes regarding digital citizenship. It is wanted to increase the target group's understanding of digital citizenship, representing a problematic aspect which people have to face in their everyday lives. Our goal is to bring about changes including adapting school curricula and creating programs specifically for young

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people with limited possibilities. People can draw analogies between the study's findings and their personal experiences.

The results of the research

New research and project ideas

The results of this research can be a starting point for other research. Additional to this, national policymakers can add new topics to their agenda.

Good practices for online courses (MOOC)

The responses of this research describe suitable online courses for youth people.

Developing more courses using DIGCIT innovative practices

Teachers and youth organisations can use DIGCIT's innovative practices and adapt them, developing more courses.

Transparency

Transparency is a principle that attracts possible partners and any person who is interested in this topic or a specific organization. The reports and all the materials that have been created can be found online and accessed by anyone. Furthermore, anybody can enrol on the MOOC platforms and access the courses there too.

Integration

The outcomes, activities and procedures of the DIGCIT will be incorporated into partner organizations. This will be the focal point of our approach since it will enhance partners' capacities (competences and resources) and show target audiences what works. That being said, all partners will integrate results, outcomes, activities and processes. In the end, the goal is to make sure that other organizations adapt and use successful techniques or lessons learned.

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About partner organizations

TEAM4Excellence (T4E) is a Romanian association aiming to improve the quality of life through education, research and consulting activities. To address societal challenges, they provide learning opportunities and career advice for social inclusion, development and employability of people, and equip trainers with key competences and skills to foster personal as well as professional development. Within 30+ EU-funded projects, the association produce and transfer innovation, experience and know-how through cooperation with domestic and international partners. By hosting events, training courses and conferences, T4E strengthen collaboration between people, support organizations and bridge gaps between generations. The wide expertise in management enables T4E staff to provide consultancy to large companies and SMEs using EFQM Model and Business Model Canvas.

The **Citizen Centre Bennohaus, Arbeitskreis Ostviertel Association (AKO)** is a socio-cultural, cultural and educational, media pedagogical, multidisciplinary and cross-generational, open meeting place and a district community centre. It is a home for teaching media literacy and the qualification of citizens with skills of all kinds. With its offers, it appeals to citizens of all ages, beliefs and social classes, especially children, youths, seniors and immigrants and inter alia concentrates on media work and education. First, it offers a broad spectrum of cultural activities ranging from free time activities via theatre plays and concerts through to outdoor activities and intercultural events for interested people of the surrounding quarter and beyond. The events and activities are generation-spanning and address the broad public. Secondly, it covers a broad range of Further Education. It offers occupational training seminars in the field of media work and media education next to musical and language lessons, media courses for senior citizens and migrants and computer courses. Participants acquire recognized training certificates and are qualified as multipliers. Thirdly, it provides space and equipment for a number of citizen media groups and which produce own radio and TV programmes that are broadcasted via internet and digital cable TV. The activities are inclusive and participatory as well as tailored to the specific needs and interests of young children, youth, adults or senior citizens.

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The **Athens Lifelong Learning Institute** has managed to establish unique expertise in devising innovative learning and empowering methodologies that enable all people to actively participate in the social, political, cultural and economic life within their community. The guiding principle in the methodologies developed by the Athens Lifelong Learning Institute is to adapt existing systems and structures to the diversity of human needs – not the other way around. Through its work, the Athens Lifelong Learning Institute contributes to the combating of poverty, inequality and exclusion while at the same time fostering development.

The Athens Lifelong Learning Institute contributes to the education ecosystem through R&D activities, creating open education programs, collaborating and promoting collaboration with advanced scientific organizations and organizing educational events. It has a long experience in the development of educational curricula and programs that keep abreast of new developments, social demands and European priorities and endorses a firm belief that real-world problem-based learning and innovative teaching methods improve learning ability, especially for disengaged and disconnected learners.

The Institute's team is comprised of professionals in the fields of adult education, lifelong learning and human capital development who work together with the ultimate goal of human capital development and social inclusion in a local, national and European level. People working or cooperating with the Athens Lifelong Learning Institute have provided the Institute with the energy and vision to continue promoting high-quality services and new ideas in the fields of vocational training, adult education, youth and social inclusion.

The Athens Lifelong Learning Institute has also a substantial experience in the development, implementation and management of sophisticated national and international projects, collaborating in partnership with several organizations, such as Universities, youth organizations, adult education providers, civil society organizations, NGOs, European expert organizations and research institutes, both from the private and public sectors.

SEAL CYPRUS is a non-profit organisation based in Nicosia, the ethnically divided capital of Cyprus. With our work, we try to overcome the results of the urban division and our members are from both ethnic groups. With participatory teaching and learning methods, SEAL CYPRUS motivates and empowers youth and adult learners to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future. The target group of SEAL CYPRUS consists of young people and youth professionals, adult and senior learners, adult educators, vocational trainers, social workers, school teachers and careers advisers. Our work targets people with fewer opportunities (people who face social barriers, financial barriers, disabilities, learning difficulties, cultural differences, health problems or geographical difficulties), immigrants and refugees.

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Acronyms

ANAD	Cyprus Human Resources Development Authority
ANPCDEFP	The National Agency for Community Programs in the Field of Vocational Education and Training
CYS	The Cyprus Youth Council
DCDS	Digital Competence Development System
DCO	Digital Competences
DCZ	Digital Citizenship
DESI	The Digital Economy and Society Index
DGGMLF	Digital Generation Gap in Migrant and Low educated Families
DI	Digital Intelligence
DIGCIT	Erasmus+ Strategic partnership to develop open educational resources for teaching digital citizenship
DigComp	The Digital Competence Framework for Citizens
DIMELI4AC	Digital Media Literacy for Active Citizenship
DJTS	Ministry of Youth and Sport created County Structures on Youth and Sports (Romania)
DL	Digital Literacy
DQ	Digital Intelligence
E.g.	For example
EBSCO	Elton B. Stephens Company
EDS	EBSCO Discovery Service
EKOME	The National Centre of Audio-visual Media and Communication
ESC	European Solidarity Corps
EU	The European Union
GSN	The Greek School Network
IC3	Internet and Computing Core Certification

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ICT	Information and Communication Technology
IIEP	International Institute for Educational Planning
IT	Information Technologies
MOOC	Massive Open Online Course
n.d.	No date
NGO	Non-governmental organizations
No.	Number
PDF	Portable Document Format
PPT	PowerPoint Presentation
Q	Question
SoC	School on the Cloud
STEM	Science, Technology, Engineering and Mathematics
TUM	Technical University of Munich
UEFISCDI	Executive Agency for Higher Education, Research, Development and Innovation Funding
UniBuc Virtual by Credis	Department of Distance Learning from Bucharest University
USA	United States of America
WUT	West University of Timisoara

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Appendices

Appendix 1 Interview information sheet

I would like to invite you to take part in a research study. Before someone decides whether you would like to take part it is important that you understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if there is anything that is not clear or if you would like more information. You will be given a copy of this information sheet to keep.

The objective of this research is to address youth workers' awareness of MOOCs, their perspective on the learners' views, and their willingness to adapt to new teaching styles. The research is undertaken as part of the DIGCIT project, which is funded by the Erasmus+ Programme of the European Union.

You have been invited to take part as a youth worker.

Participation in the project is voluntary, and you can choose not to participate in the project. You can withdraw at any stage of the project without being penalized or disadvantaged in any way. It is up to you to decide whether or not to take part. If you do decide to take part you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

This research project employs a qualitative research strategy by the selection of data via semi-structured interviews lasting 30 minutes. This interactive dialogue offers insight into different people's opinions, beliefs, attitudes and experiences. There are no possible or reasonably foreseeable risks of harm or possible side effects to the potential participant.

The benefits of taking part in this research are indirect and include potential benefits to future youth workers as well as benefits to the wider community and society by the establishment of useful guidance for the practice of MOOC programs.

……. is the data controller of this study. This means that we are responsible for looking after your information and using it properly.

To safeguard your rights, we will use the minimum personal-identifiable information possible.

The interviews will be recorded in such a manner that the subjects could not be identified. In addition, the security of raw and processed data will be obtained electronically by its storage in the researcher's personal encrypted laptop and printed form in the researcher's home office. Data and documents will be coded so that if access was to be unlawfully gained to the laptop and the office, the identification of individuals would not be possible. Quotes used in the writing up of the research will be anonymized.

The results will be published on the project website https://trainingclub.eu/digcit/ and other publications, within which the anonymity of the participants will be maintained.

If you have any problems, concerns or questions about this study, you should ask to speak to a member of the research team or the project manager.

Thank you for taking the time to read this information sheet.

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Appendix 2 Interview consent form

This interview takes place in the context of the Erasmus+ project titled "Strategic partnership to develop open educational resources for teaching digital citizenship – DIGCIT". The aim of this activity is to delve into youth workers' perspectives on digital citizenship MOOC education.

The objective of this research is to address youth workers' awareness of MOOCs, their perspective on the learners' views, and their willingness to adapt to new teaching styles.

The main purpose of this interview is to offer insight into the participants' opinions, beliefs, attitudes and experiences by conducting an interactive dialogue.

Consent Statement (Please tick the relevant boxes)

Statement	Tick the box
I confirm that I have read and understood the information about the study and have had the opportunity to ask questions	
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason.	
I agree to take part in the study.	
I understand that the information I provide will be treated in confidence by the investigator and that my identity will be protected in the publication of any findings.	
I agree to the use of "direct quotes" as long as my anonymity will be secured.	

_____	_____	_____
Name of Participant	Signature	Date
_____	_____	_____
Name of Researcher	Signature	Date

* When completed, 1 copy for the participant; 1 copy for the researcher file

** Alternatively, the consent form may be given electronically using Google Forms or similar.

Appendix 3 Research interview template

Q1. Why did you decide to become a youth worker?

Q2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?

Q3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCs?

Q4. How do you think MOOCs can help you with your professional development?

Q5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?

Q6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to the same?

Q7. Please comment on the following statement:

"*Online education is a one-size-fits-all endeavour. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is.*" (New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/).

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Appendix 4 Research interviews in Romania

Q1. Why did you decide to become a youth worker?

T4E-1-AI: "*I become volunteering in 2010, when some acquaintances recommended me to carry out volunteering activities with an NGO. Sometime later, I did a youth worker course, I've learnt a lot and I liked this occupation. I have experience in working with teens and kids from Salvati Copiii NGO*."

T4E-2-GB: "*I decided to become a youth worker because I like to work with young people and I believe that with my psychology background I can add value to them. The youth work is very rewarding, because with every session you can feel that you have improved one's attitudes and skills*."

Q2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?

T4E-1-AI: "*I did not deliver any online training but I worked with other volunteers online while planning for other face to face activities. I am patient about educating people through games because that create a chemistry among us, as trainers and our learners. It is a good way we can develop their abilities. In 2016, I participated in a volunteering project - EVS in Estonia, where we organized and played a puppet theater. It was one of the best experiences I had, in terms of rapport and bonding of trainers with participants*."

T4E-2-GB: "*I especially like that every young participant brings new ideas and perspectives. Young people are early adopters in everything and this helps me get up-to-date in many aspects. Although in an unfortunate context, I really enjoyed the online activities during the pandemic.*

During the covid pandemic we moved online without delay. We did not have and we did not need any transition period. We did not encounter any major problems in going online with our youth work.

The kids of seven years old or older were very open and adapted very well to online activities. Young people are very good and intuitive users of the digital environment and had no problem in participating in online activities, sending photos, making small movies, etc. For smaller kids it may be more difficult to participate in online learning, but it gets a lot easier with teens. What we observed is that young people like to express themselves online using video, are able to create an environment similar to those in classroom activities and get very easy over small technical problems such as disconnections, dropping their phones, etc. Compared to ten years ago, youth nowadays are more natural online and master technology a lot better.

Youth workers were a bit slower than the young people to adapt to the new online environment. At times, myself as a youth worker I've learnt from young people and they helped me to facilitate the sessions. I tried to team up with young people, to set common goals, for our training and support activities.

The parents feared that online classes will not have the same positive impact on their kids because they thought that there will be no emotions during activities. In fact, the behavioural therapy activities went very well because we, as trainers, were able to see the reactions of young people in real time. However, the activities such as art-therapy were more difficult to conduct.

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Primarily, we used WhatsApp video calls as a synchronous online channel of communication for our activities.

We also did asynchronous online activities, e.g., we asked them to draw things and send them to us. Also, we gave homework activities which were more related to critical thinking on the topic at hand. We learnt that a maximum of three tasks for home are a good number. We did not just end up our sessions without any kind of follow up. Especially during the COVID pandemic, young people had a lot of spare time. Therefore, we asked them to comment on mottos/quotes about ambition, motivation, success. Another lesson learnt from our online activities is that we get better results if young people spend time daily on the topic, rather than catching up once a week.

It takes longer time and more efforts to prepare online activities compared to face to face activities. For example: we had to inform parents and young people to prepare GDPR agreements, digital logistics, stationaries (e.g., Paper, pen, pencils, colour)."

Q3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCS?

T4E-1-AI: "*I have account on EDX platform and I started some online courses as a learner. However, I never completed any of those because I find them boring, lacking the engagement the course participants and having virtually no activities. As a youth worker, I am not very confident delivering online courses because I do not have the resources (online course content and MOOC platform) and competences (IT and online facilitation skills) to do so*."

T4E-2-GB: "*As a youth worker, I realized that the importance of the online learning especially during the pandemic. Based on my experience, I am very confident while delivering online training. It is just a matter of prior preparation, good structure of materials and activities*."

Q4. How do you think that MOOCs can help you with your professional development?

T4E-1-AI: "*From my experience, I think teaching and learning online is more difficult than face to face. It is difficult organize games, you cannot use board games which is an essential tool for any trainer, there are several challenges including the availability of devices and high-speed internet (many young people do not have a job and have no money to purchase devices). In the online courses I saw, there were only individual tasks and no group activities, this is a major setback*."

T4E-2-GB: "*In 2013, I attended an entrepreneurship course organized through POSDRU Romanian Program. It was delivered online live but it also had an asynchronous component. We had two facilitators who delivered the course content live but also provided Powerpoint presentations and other support materials. The course was divided I modules of about ten hours was really well-structured and was really practical. The trainers used to ask questions for attendees to answer live and on the platform forum. Feedback was also provided.*

Comparatively, I participated in another online course in 2018 on the same topic, but it was a real waste of time. The difference between the two courses was the structure of the learning materials and the way it was delivered.

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As a learner, I was there to really learn something and make effective use of my time, not just to get another diploma. Therefore, I believe that MOOCs can help people in their professional development, but courses need to be of a good quality."

Q5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?

T4E-1-AI: "*First of all, I believe that young people should still go to school, rather than learning online. However, learning in a moocy way has some advantages. For example, people can learn in the comfort of their homes, at their own pace. I think people enroll to courses, which is an indication that they are open to online learning. The problem is that most of them do not complete those courses, which may tell us that the courses do not maintain learners' motivation throughout the course*."

T4E-2-GB: "*Firstly, many young people do not know where to find online courses. Secondly, they do not know what to study. Sometimes they enroll a course just to flick through out of curiosity, but they drop out very quickly. It could be that that the course is not what they were looking for, or the content is not good enough, or the delivery methods are not attractive. Therefore, I believe that we need to create attractive and engaging courses. Also, it is very important always to organize a follow up on every online activity for the learners to think through. It is also important to provide support materials to learners*."

Q6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to same?

T4E-1-AI: "*In my opinion, the challenge in online learning is the interactive component and not having colleagues around you. Perhaps a compromise would be the blended learning where part of the content s delivered online and essential activities are carried out face to face*."

T4E-2-GB: "*I believe that the pandemic shows that anyone can learn online. The problem is with what results. Also, from the teacher/trainer perspective it is a lot harder to deliver an online material, rather than face to face. In online you need to stick to the lesson plan, because online you cannot just have an idea to bring a new board game from the cupboard and literally invent a new activity on the spot. In my work, an online group of psychologists helped during the pandemic*."

Q7. Please comment on the following statement:

"*Online education is a one-size-fits-all endeavor. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is*." (New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/).

T4E-1-AI: "*Standardized vs Customized. To me, the greatest challenge/restriction to the MOOC approach is that, in order to engage actively in course young participants, need to ask themselves what they want to learn and to find those learning points into the respective course. Any course (online or face to face) need to be focused on what the participant needs to learn*."

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T4E-2-GB: "*There are many things that can be standardized. For example, we learned that therapeutic stories have better impact if recorded and provided online to young people, rather than being provided in a written form.*

We also learned that video content is more appealing to young people compared to written content. That is because youth, nowadays have less patience. Modular video presentation of 10-15 minutes worked well with many topics, e.g., establishing objectives, going through preset number of steps to achieve something, etc. This kind of presentations may be combined with practical applications from students. Some people prefer audio podcasts.

We also learnt that one should not ask for feedback and should not assign a task immediately after delivering a chunk of information. That is because young people may be emotional on the short term. However, they are able to think critically, to analyse and structure their responses in a profound way and to provide a good synthesis of result of their thought process. If we allow some time for this process and ask for written response, the results are really amazing."

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Appendix 5 Research interviews in Greece

Q1. Why did you decide to become a youth worker?

ALLI-1-GK: *"I have always been close to youth and about how they can more easily acquire skills through experience than through structured training. My organization helps young people to plan their own progressive development by choosing from a great variety of programs and activities according to their needs and interests."*

ALLI-2-IM: *"I became a youth worker in a youth organisation because I felt passionate about dealing with youth migration issues, social inclusion and sheltering unaccompanied minors. This is exactly what I do in my current job."*

Q2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?

ALLI-1-GK: *"For me, I think it is an internal drive to work with others and to help them develop into good citizens as they grow up. I like to help especially those with fewer opportunities not only to be integrated, but to feel integrated in the community."*

ALLI-2-IM: *"Help, support, things not easily offered today by anyone. Our team's work is based on communication, dialogue, companionship and personal contact. We were giving and we were taking so much more back."*

Q3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCS?

ALLI-1-GK: *"Our members are familiar with technology. They have the knowledge and the resources. But it is up to us to design attractive programs. We have to have the know-how of this kind of educational communication."*

ALLI-2-IM: *"We forgot that we are a youth organisation. We felt that by offering educational programs everything would be ok…And now during lockdown we wondered what went wrong…I believe that the problem concentrates on the following issue: we really don't know our target group. We are a youth organisation that seeks to develop young people. Maybe if we recall who we are, maybe we will find out how to help our target group more efficiently."*

Q4. How do you think that MOOCs can help you with your professional development?

ALLI-1-GK: *"We are resistant to change, because we are afraid that by changing, we may change also the mission of our organisation. This is not our purpose…I think we are resistant to anything new. I recall a period when we thought that it was about time to start focusing on priority programs and leave everything else aside. And then we started quarrelling, on a friendly basis of course, with each other…You see the other programs brought us members. But I wonder whether this practice has altered the character of our organisation… But MOOCs can definitely help us and our organisations to grow and develop into an intentional and structured way."*

ALLI-2-IM: *"I think that MOOCs can help me be more professional and reach more people to improve their skills. I can learn by attending MOOCs, by creating course materials and integrating them into an*

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online learning system and by facilitating the online learning process as a course manager. The MOOCs are also a really good opportunity to learn new digital tools."

Q5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?

ALLI-1-GK: *"Well, I thought they already are. I know a lot of young people who self-study from various online platforms. The challenge is to have free access to good quality materials on the topics that they need and want."*

ALLI-2-IM: *"I believe that the formal education will never be the same after Covid. As the schools moved online, teachers and students had to attend online classes and got more experienced in online teaching and learning. From here there is just one step for students to search and attend MOOCs."*

Q6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to same?

ALLI-1-GK: *"I'll give you an example of what I am talking about. While attending to the online activities, I envisaged that at the end of the sessions and discussion the youngsters would decide how they could transform their knowledge into action. And the result was that: we did the activity with the map, we discussed about the use of the compass and then said goodbye. No action, no mobilization. As if we were watching a TV class…That's what is missing: social action and response to the practical needs of the contemporary young people."*

ALLI-2-IM: *"The obstacles may be related to their digitals skills and the availability of internet and laptop/mobile devices."*

Q7. Please comment on the following statement:

"*Online education is a one-size-fits-all endeavor. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is.*" (New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/).

ALLI-1-GK: "In my experience, this is most of the time true. This is perhaps the reason why the completion rates of MOOCs is very low."

ALLI-2-IM: *"To some extent I agree with this article, but it does not have to be like that. These courses could have some engagement tools, such as forums, discussion groups and gamification elements which can make them more engaging."*

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Appendix 6 Research interviews in Germany

Q1. Why did you decide to become a youth worker?

AKO-1-BJ: "*I have decided to become a youth worker because I love working with people. It was always my dream to support especially young people, to show them various possibilities which they have in live and offer guidance in achieving their goals*."

AKO-2-MA: "*I became a youth worker because I really see potential in today's youth to open new paths for the future, to make important changes happen that are necessary for humanity and the planet. Young people tend to think more critically than older people who have got used to think in certain patterns and have accepted this status quo*."

AKO-3-GK: "*Working with Youth was not my initial choice but it is something I have grown up to. I have decided to do it because I like to work with people and being surrounded by others who crave knowledge. Youth are more open and it is easier for them to learn something new*."

Q2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?

AKO-1-BJ: "*Unpredictability. Even though I might have a day plan in my notebook, I can never be sure what is going to happen. And this is beautiful. Every day is special. Every person is unique. I learn every day to adjust, to be flexible, to be patient and to be ready for unexpected*."

AKO-2-MA: "*I really enjoy it when I support people in learning skills and see them progressing then and start applying the skills autonomously. That shows me that my works gas result. It's also really interesting to find a balance between showing and teaching on the one hand and giving the students free space to experiment and try on the other hand*."

AKO-3-GK: "*Actually I've been teaching for the past 10 years and trying out different jobs and seeing what am I good at. I think what keeps me coming back to work with youth is the thankfulness of students and the results of my work which is seeing them improving their skills. I know then that it was worth it*."

Q3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCS?

AKO-1-BJ: "*I know what MOOCs are and I am aware of the concept behind them. I took part in a few MOOCs. Indeed, they helped in my professional development, however, they were not directly aimed at youth workers. I would like to learn more on how to create MOOCs and how to use them in my daily work*."

AKO-2-MA: "*I feel prepared for MOOCs because many methods of offline classes can be used online, too. Of course, one has to be creative to find solutions for special online situations but much of that is just a question of experience. Something very useful in online classes are smaller working groups where the students can exchange their thoughts and help each other*."

AKO-3-GK: "*I know it is an online place for learning with some resources that can be useful. I am not sure if I have the necessary skills to add something, to provide the website when it comes to my subject, especially that I am teaching most things from books. But I would be happy to add more input when it*

comes to my hobbies (drawing, animation basics). This is something that I have already been teaching during summer camps. Me and my students enjoyed it. So far, I did not use any MOOC."

Q4. How do you think that MOOCs can help you with your professional development?

AKO-1-BJ: "*MOOCs are a great way to learn and improve myself whenever and wherever I want. Especially, now in the pandemic times it is so crucial to find solutions which technology is offering us. Many of my colleagues have never heard of MOOCs and it is really a pity. I think that the in the field of youth work they should be promoted more*."

AKO-2-MA: "*Through MOOCs I also got challenged because I had to deal with new situations and had to adjust offline concepts to online concepts. The MOOCs experience helped me develop my own methods*."

AKO-3-GK: "*I think that for anyone learning online is a standard, especially with the current situation. YouTube tutorials, DIY and cooking recipes are available for anyone. It is trendy. The problem with it is that the sources and the quality various from video to video. So, I think, with the proper professional place that gathers great material for teachers and youth workers could be very useful. The quick accessibility (it is all the time there and you do not need to do this at specific moment), you can do it in your own pace – this is an interesting concept for me. I think that it would be good, when such a course would remind me (e.g., "we haven't been seeing you for a long time") to come back and finish the modules*."

Q5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?

AKO-1-BJ: "*In my opinion, schools in general are not willing to change and go with the times. Many teachers and trainers think that old methods are good and should not be changed. It is a wrong thinking. Nowadays learners are digital natives; they must receive teaching methods which are efficient and adjusted. Inseparable part of their learning should be digital resources. MOOCs give them such a possibility. The change should start with us (teachers, trainers, youth workers), not with learners – they are already ready*."

AKO-2-MA: "*I think the point is to activate the students/learners because one of the main problems is the difficulty of paying attention on online classes for a longer time period. I don't think that learners have to be deschoolified but that the methods have to fit*."

AKO-3-GK: "*I think they have to get rid of all those standard teaching traditions, which they got in their heads since they were young. When it comes to traditional schooling it is a very much one-sided deal. I mean there is obviously an interaction between teacher and student but there is kind of curriculum in which you have to learn to a certain kind of test and some teachers have this one kind of model of teaching in which they are just doing monologs, telling the stories. There is not a lot of back and forth. When it comes to be opened to the online courses, I think they have to have a lot of will power from their side, they have to be a kind of their own teachers and give themselves some deadlines, some time every day so it becomes a tradition, a part of their lives, part of their schedule, which can help them achieve their goals*."

Q6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to same?

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AKO-1-BJ: "*Yes, I believe that every kind of learner can take advantage of MOOCs*."

AKO-2-MA: "*I think especially people who developed their ideas especially in groups have to get used to the atmosphere of online learning because the direct personal contact to the group members is missing. Also, for shy people it may be difficult because online the trainer may not see if certain students have difficulties in understanding or progressing and if they're shy the maybe wouldn't ask by themselves*."

AKO-3-GK: "*I think the biggest obstacle would be someone technologically illiterate, especially older people. Maybe not everyone has a connection to a good internet. However, when you are open to it and you want to learn, when you see that there is a clear benefit of doing it, I think that no hurdle is too high for you*."

Q7. Please comment on the following statement:

"*Online education is a one-size-fits-all endeavor. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is.*" (New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/).

AKO-1-BJ: "*It is not the question of what is better – online or offline. The core of the idea is the balance we need to find in online and offline education. Learning is adjusting to needs of learners in a way that they take 100% from the learning process. Learning is noticing the needs and being open to changes. Learning is whichever step needs to be taken in order to support our learners*."

AKO-2-MA: "*Of course through online learning there isn't a close contact between trainers and students like in "real-life learning" and that has negative effects on how trainers can get an impression of the students' thoughts and feelings and their progress. I have the impression that online students often don't ask questions - even if they haven't understood a task or an explanation. But I also think that methods play an important role. Especially online students have to be activated to do something on their own even if they are not at the same place as the trainee and the other students*."

AKO-3-GK: "*Well, that sentence rather repeats my previous argument that it is a kind of one-way experience when it comes to online courses. There is not a lot of interactivities. It would be good to have some kind of email contact with the people who do the course. However, the teacher cannot chat with every student. There are for sure some solutions for that. For example, right now while teaching online we use some tools which is something in between those two teaching methods – it is online but you have a connection to the microphone, camera. You can collaborate on projects. However, some problems also accrue here – somebody does not have a microphone, etc. I think there are good sides and bad sides to both*."

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Appendix 7 Research interviews in Cyprus

Q1. Why did you decide to become a youth worker?

SCY-1-AS: "*Perhaps the main reasons I decided to be a youth worker is that I enjoy challenges and youth is one of the most challenging area. Another thing is that, as a youth worker, I have the opportunity to make a positive impact to young people and to the society in general. Over time, I have been involved with youth through Erasmus and eTwinning*".

SCY-2-NC: "*I became a youth worker by pure chance, but I'm very grateful it was so. I came to this profession when the digital revolution came to Cyprus, so I was at the forefront. Ever since, I worked on a number of EU projects on broadly related issues*".

Q2. What are the causes you feel passionately about your work? What brings you the most joy in your work? Can you tell me about an aspect of an experience that you've really enjoyed?

SCY-1-AS: "*I believe that, as a youth worker, you have a great opportunity to pass your knowledge to others. It is very rewarding to offer learning and networking opportunities to young people. At the same time, it keeps me current with the times and gives me the opportunity for new challenges. Also, it makes me very happy to see the excitement of young people I work with. In addition, I like their willingness to engage further and follow up into new experiences*."

SCY-2-NC: "*A youth worker is a blender of sorts that needs to know how to do everything. We need to be active and invest time and love in our work. These are the main reasons why I am passionate about youth work. In addition, I enjoy offering constant professional and personal development, thus helping young people to advance themselves and be competitive. I strongly believe that helping young people helps the future and I enjoy being part of this changing landscape. Finally, you get much reward in the appreciation you receive and this keeps you young*".

Q3. What is your level of awareness of the MOOC concept? Do you think that you are adequately prepared and have the required knowledge and skills for the provision of MOOCS?

SCY-1-AS: "*I could say that I have a very high level of familiarity with the MOOC concept. I could personally teach in such manner as would most of my colleagues. In fact, the concept is beginning to gain traction and there is currently some training on how to teach in such settings. Moreover, an obligatory course on this was implemented by the Ministry of Education. I even participated in a number of these courses and related seminars and workshops. However also note that the Ministry of Education and the Pedagogical Institute begun offering webinars on various topics. These are not part of the official curriculum however and they are VET in form. There is also an obligatory course for teachers on how to teach in online settings. Though it is not for youth workers per se, this is a step in the right direction.*"

SCY-2-NC: "*I believe that I have a high level of awareness and the ability to perform so. I also participated in a number of these courses, seminars and workshops, but I need help for preparation and some technical support. As for the level of fellow youth workers, this is somewhere in the middle; about half of them are familiar and would be comfortable in doing so. To this end, there is a great need for training in MOOC delivery, including knowing the essential platforms and specifics of this environment. MOOCs in Cyprus do not really happen. If they do, they are in a form of university or other type of higher education establishment course offered to enrolled students. Notice also that with*

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respect to the measures taken to combat the epidemic, public and private schools in Cyprus begun using online courses for teaching. The same is true for the Cyprus Human Development Authority with regards to VET courses for adults. As such and given that some MOOCs happen on an EU project level, perhaps the tide is beginning to change. As of now however, people do seem to prefer seminars. Of course, these seminars might be broadcasted live. As far as I know, there is no MOOC preparation course; at least not on a government level. However, the Digital Agenda of Cyprus and the general tendency does seem to involve a lot of e-subjects such as e-health and education that will not be far behind."

Q4. How do you think that MOOCs can help you with your professional development?

SCY-1-AS: "*All in all, MOOCs can help but not as much as face-to-face meetings/courses. MOOCs have a number of benefits such as cost and time savings; they require less space but may bring up technical difficulties. Some other problems include the lack of socialization and peer to peer exchanges. Also, these courses require rescheduling of schedules to adjust to individual learning. In my opinion, MOOCs are more suitable to skills training, rather than academic knowledge. It would be good for MOOCs to build upon strengths to overcome these challenges*."

SCY-2-NC: "*MOOCs are important because they allow access to vast array of lecturers, information and topics. They are inexpensive, environmentally friendly and time saving. Participants have the opportunity to acquire best practices and different perspectives outside of the national context. More and More MOOCs are gaining acceptance in the unofficial learning settings. It is possible to see soon in Cyprus such open courses been offered in an official capacity. This is especially so with the Open University of Cyprus which is one of the highly regarded public universities that offers distance learning. As such, MOOC training can be quite useful here*."

Q5. How do you think that learners can be "deschoolified" so that they are more open to learning in a "moocy" kind of way?

SCY-1-AS: "*For that to happen, we need a change of culture because MOOCs are not yet as highly regarded as traditional learning settings. We need a greater development of evolution and monitoring tools as well as to build social elements into teaching that are found in conventional courses. In addition, MOOCs require specific techniques to be acquired by learners and trainers. In my opinion, perceptions need to change as MOOCs are underestimated while the traditional approach is still highly preferred. With MOOCs, the personal commitment needs to be higher than in traditional learning because the reduced supervision while attending MOOCs. In Cyprus perhaps more than other countries internet learning is not regarded highly. As such, pushing forward will require an all-actor approach in material and perception change*."

SCY-2-NC: "*It depends on the profession and time availability of participants. There are a lot of them who actually prefer it and have no fear of technology. To this end, familiarity with digital environment and digital skills may aid this along, because there is a need for skills that can help MOOC perception and delivery. Perhaps learning courses that display the cons and pros of face-to-face compared to MOOC could help, as part of a broader approach to modernize education. Non formal learning needs also to be pursued as does lifelong learning. In Cyprus, the traditional teacher with a book in the hand approach is still implemented. This is true from primary school on to university. However, the times are changing and more and more we observe modern teaching practices being employed. For example, public universities accept transfer students that do not have to pass written entry exams. A number of Schools are involved in EU projects that require self-directed learning and watching seminars online.*

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The concept of assignments over written exams is gaining traction. Newer generations of parents are more comfortable with this and so on."

Q6. Do you believe that every kind of learner can take advantage of MOOCs? And if not, what are the obstacles and remedies to same?

SCY-1-AS: "*Yes, but people need basic internet and digital skills including literacy. There is a need for greater commitment and self-discipline, while familiarity with online environments is essential. MOOC learners seem to be more self-directed than team workers. What is currently lacking is perhaps an "MOOC culture", which needs to be cultivated. There are however evolutions in this area and a turn towards it*."

SCY-2-NC: "*Perhaps so, but learning depends on the willingness to learn; soft skills are essential in providing for acceptance. Also, familiarity with digital environments needs to be build up, while some people need to improve their digital literacy and skills in order to access MOOCs. There are, of course, many challenges associated with MOOCs. For example, there is no real opportunity to disagree and pose real time questions, so MOOCs can turn into a monologue. Participants may be uninspired if MOOCs still follow lecturer traditional methods. They may lose interest, so special skills and theories need to be developed. To overcome these challenges, perhaps hybrid MOOCs can help with physical and non-physical appearances. These may provide real chances to socialize; peer-to-peer sessions may also help. In this context, perhaps a trainer certification as online trainers is needed. Given the teacher centric system of education in Cyprus this type of learning might be a new area. People might be extremely unfamiliar with them. Perhaps introductory courses could help. With students been used to the teacher providing feedback and checking face to face progress, this method might cause several to fall behind. Language could also be a barrier given inability to receive non-verbal messages*."

Q7. Please comment on the following statement:

"*Online education is a one-size-fits-all endeavor. It tends to be a monologue and not a real dialogue. The Internet teacher, even one who responds to students via e-mail, can never have the immediacy of contact that the teacher on the scene can, with his sensitivity to unspoken moods and enthusiasms. This is particularly true of online courses for which the lectures are already filmed and in the can. It doesn't matter who is sitting out there on the Internet watching; the course is what it is.*" (New York Times, https://www.nytimes.com/2012/07/20/opinion/the-trouble-with-online-education.html/).

SCY-1-AS: "*I agree that personal contact cannot be substituted and it is easier to create a positive environment in classrooms. The online doesn't really allow for interaction and empirical learning. Yet, MOOCs still make some good sense because there are courses (on digital topics, for example) which are hard to implement in classrooms but there are some better online opportunities. In this regard, the youth work is very important to promote and design and deliver online courses, including MOOCs. The EU programmes cover a lot of the gap but there is a need for more. In Cyprus, there is a real debate on how to proceed with MOOCs development. A number of initiatives begun to appear with VET like webinars been offered but these are rather limited in context and not suited for all youth work related areas. The greater emphasis is with regards to teaching of school lessons*."

SCY-2-NC: "*That is perhaps true for many MOOCs, but it depends on the course designers for the one-size to really fit all course participants. Otherwise, some participants may be loose attention and drop out from the course. That often happens because MOOCs don't really allow for questions, do not allow*

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for disagreements, there may be technical problems and usually such courses do not build social skills. Also, peer to peer learning is harder, while socializing with fellows and exchanging ideas does not happen too often. However, MOOCs are necessary regardless of all their shortcoming. These courses can be offered complementary to traditional courses. There are some limitations in educational technology that are nonetheless slowly overcome. The future could hold virtual classrooms. There is also the matter of personal choice and the notion of what works best for one might not for another. However, there is indeed a lack of immediate contact that will allow one to better understand a learner's needs. Perhaps these could be accompanied by smaller workshops. New teaching techniques could be developed.

At the same time, youth work can help MOOCs development. This is so as digital skills as well as soft skills are a great part of youth work. As such they can help young people understand the modern environment and recent measures to seem to be pointed in the right direction such as with the government putting forth plans to recognize youth workers and universities offering relevant training and degrees on the field. Actors need to come together. There is a need for more cohesion and follow up of relevant initiatives."

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