

DIGITALIZATION OF NON FORMAL EDUCATION: METHODS, TOOLS AND EXPERIENCES

DEE-GEAYS



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SUMMARY

This particular document, joint desk research dedicated to the digitalization of non-formal education, represents the intellectual output #2 of the Digital Education Era Global Citizenship Education for Activating Youth Online Space (DEE-GEAYS) project. The first intellectual output is the joint desk research dedicated to the existing Global citizenship education methods and best practices with particular focus on social-emotional learning.

The purpose of this research is to introduce and support the youth organizations for the much needed digitalization of non-formal education. The digital tools are already widely used by the youth work sector for dissemination and exploitation of Erasmus+ projects results. However, we as youth workers are still struggling to functionally operate online as learning providers. Along with this, while in the context of Covid-19 pandemic the formal education sector was able to immediately jump into online education, exploiting existing digital technologies, the youth work sector still has to understand how the non-formal education can follow this path, considering its cross-border nature, capitalized achievements and keep bonded connection to its target groups.

In the current context, our proposal thus is focused on finding creative solutions to support the youth work sector to step into the virtual world, in order to reach our target group, young digital natives, that are already there.

Through this joint-desk research, a team of 7 youth organizations have created a strategic partnership to realize a research paper to introduce digital non-formal education to their counterparts. Thus, in this research the team focused at;

1. Providing the necessary context to understand what digital education is from a generic point of view and how it is applied in Europe.
2. Listing several initiatives and educational programs aimed at closing the digital skills gap and equipping young people with the abilities they need to succeed and thrive in the digital economy.
3. Classifying digital platforms and tools that support seamless integration of the core principles of non-formal education.
4. Providing strategic and operational recommendations on the implementation of digitalization within the non-formal sector.

This joint desk research was conducted between February 2021 - July 2021. The data gathered within the research will be used for building labs/workshops for the later half of 2021 (Intellectual Output #3), which will be digitally recorded and will become the building blocks for the digital platform for non-formal education courses and workshops.

Following activities will lead to the achievements of the project objectives and delivery of the planned results for the project DEE-GEAYS;

- Joint desk research divided in two parts, one dedicated to the existing GCE-SEL NFE methods and the second one on the concept of NFE digitalization (this document), aims to provide a solid objective research base for the quality project development, in particular further elaboration of the creative and innovative methodology on GCE for labs provided on the next step to young people from partner countries.
- Labs are the key activity on national levels and allow engaging 15 people from each country in a blended mix of creative non-formal and informal activities during 5 full day meetings on GCE-SEL followed by a

complex group debriefing on potential digitalization of the methods. The labs and focus groups on the methodology will be recorded.

- Educational podcasts based on the lab's experiences, including interviews with participants, audio-guidance for SEL exercises, new dimensions of the GCE and other focus. The narrative of the podcasts target both youth workers and young people who'd like to learn about GCE and SEL.
- Creation of a tailored digital platform where the created virtual content, narrative, structure, virtual rooms, tutorials, recommendations etc. would be available which supports the non-formal educators to learn and teach digitally.

1. UNDERSTANDING DIGITAL EDUCATION IN EUROPE

1.1. Introduction

The Internet is the global connectivity of individual networks managed by government, industry, academia, and private entities. Originally designed to connect government research centers, the Internet has grown to serve millions of users and a wide range of purposes in all corners of the globe since 1994.

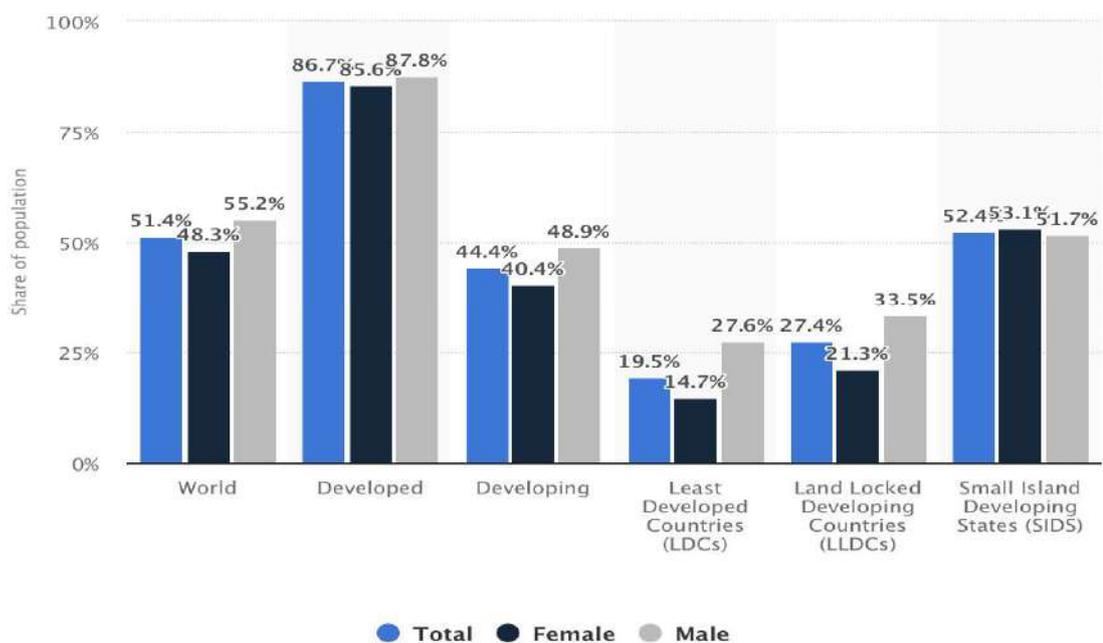
In just a few years, the Internet has established itself as a formidable platform that has forever altered the way we do business and interact. The Internet, more than any other form of communication, has given the globe an international or, if you prefer, a "Globalized" dimension. For millions of people at home, school, and work, the Internet has become the universal source of knowledge.

The internet is always evolving. Its recent evolution has been defined by two factors: the social web and mobile technologies. The way individuals utilize the Internet has altered as a result of these two breakthroughs. People have discovered a new method to communicate thanks to the social web. Facebook has evolved into a global network of over 2,803 million active users since its inception in 2004. Mobile technology, on the other hand, has allowed the Internet to reach a considerably wider audience, resulting in an increase in the number of Internet users worldwide.

The Internet remains the most democratic of all forms of public communication. Anyone can have a web page on the Internet for a very low cost. Almost any business, regardless of size or location, may access a very broad market in this way, directly, quickly, and affordably. Almost everyone who can read and write can have access to and a presence on the World Wide Web for a very modest cost. People all around the world are expressing and sharing their ideas and opinions like never thanks to blogging, which has cemented social media.

The internet is continuing to change how we connect with others, organize the flow of things, and communicate information all across the world. The internet has become an increasingly important aspect of our daily lives as its influence on individual consumers and major economies grows.

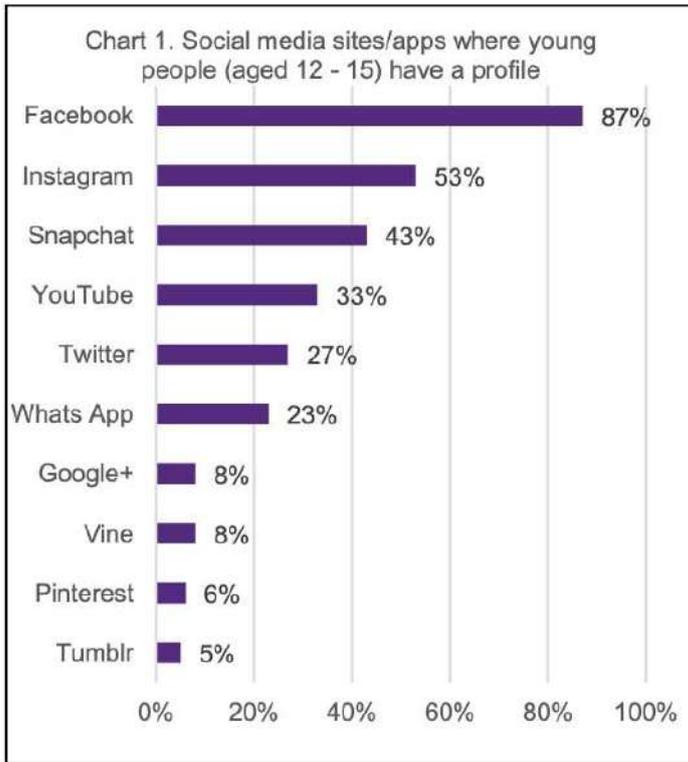
In 2019, there were 3.97 billion internet users globally, which means that more than half of the world's population is now linked to the internet. However, while the digital population is clearly increasing in many regions of the world, internet access and availability varies greatly by region



The use and role of the internet in people's lives has changed dramatically during the last ten years. More and more people are using the internet to do more things because of the proliferation of smartphones and tablets, the availability of Wi-Fi and 4G technologies, and advancements in social networking websites such as Facebook and applications.

People under the age of 44 make up the highest proportion of internet users (with use equally high among 16–24-year-olds and 35-44 year old). This trend is reflected in the usage of social media and applications, with the majority of young people aged 16 to 24 reported utilizing social media sites and apps in the previous three months (87 percent). As a result, public policy and research have focused on the impact of the internet and social media on youth.

Various groups of young people utilize the internet for various purposes. Young people's online behavior is considered as "entertainment and enjoyable" between the ages of 8 and 11, but as they get older, this tends to change. Their behavior becomes characterized by "exploring and getting to grips with new independence" between the ages of 11 and 14. They utilize the internet to "keep in touch with their environments and seize chances" when they are 14-17 years old. Communication often dominates online activity at this age, and the majority of these young people use various social networking and messaging services. (See Chart 1)



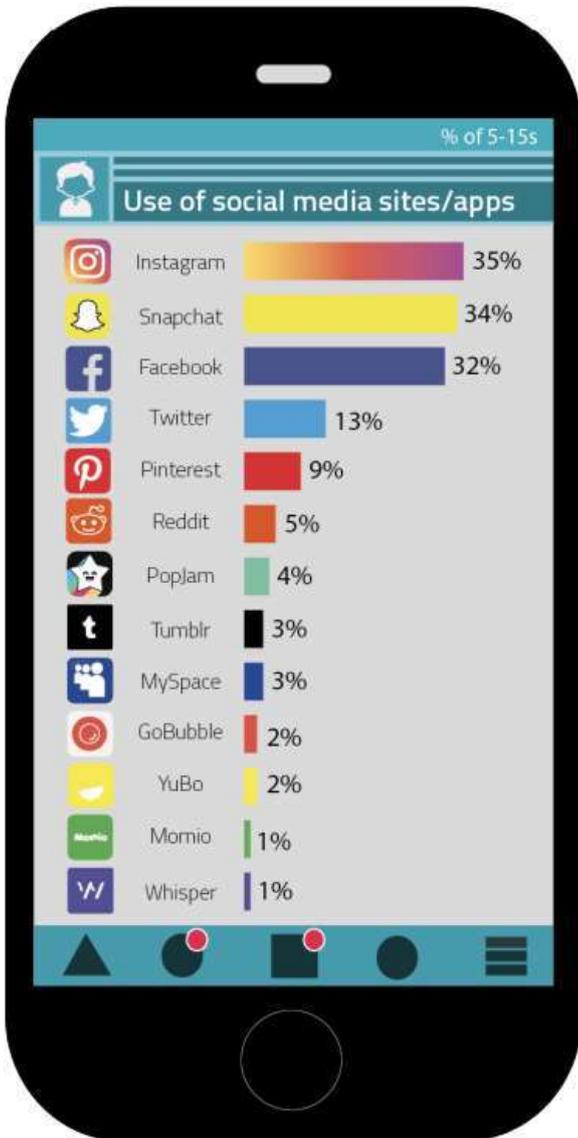
In 2015, as it has been explained, those were the main apps used by the youngsters

In 2021, things have changed a bit. Children used a diverse range of sites and apps for their social media activity, maintaining the trend from prior years. Instagram was the most popular app among older children (12-15 years old) (66 percent), followed by Snapchat (58 percent), and Facebook (56 percent) (54 percent).

These three were utilized in similar amounts by 8–11-year-olds (used by around a fifth). The main gender difference in use was that females were more likely than boys to use Snapchat or Pinterest, especially those aged 12 to 15.

Twitter

Reddit



As we have seen, the digital era has arrived and it fast spreading among the young, therefore we will summarize the current scenario among them with a diagram that illustrates the situation.

Media use by age in 2020: a snapshot

5-15 year olds

61% have their own tablet, and 55% their own smartphone

To go online - 70% use a tablet, 69% a laptop, and 65% a smartphone

56% watch live broadcast TV, and 91% watch video-on-demand content*

71% play games online

55% use social media apps/sites

65% use messaging apps/sites

97% use video-sharing platforms (VSP)

45% use live streaming apps/sites



5-7 year olds

57% have their own tablet, and 14% their own smartphone

To go online - 77% use a tablet, 51% a laptop, and 40% a smartphone

48% watch live broadcast TV, and 88% watch video-on-demand content*

50% play games online

30% use social media apps/sites

33% use messaging apps/sites

96% use video-sharing platforms (VSP)

33% use live streaming apps/sites



8-11 year olds

66% have their own tablet, and 49% their own smartphone

To go online - 76% use a tablet, 72% a laptop, and 62% a smartphone

58% watch live broadcast TV, and 91% watch video-on-demand content*

78% play games online

44% use social media apps/sites

64% use messaging apps/sites

96% use video-sharing platforms (VSP)

39% use live streaming apps/sites

40% are aware of ad placements in search engines
(8-11s who go online and use search engines)

27% have seen worrying or nasty content online
(8-11s who go online)



12-15 year olds

59% have their own tablet, and 91% their own smartphone

To go online - 87% use a smartphone, 80% a laptop, and 60% a tablet

51% watch live broadcast TV, and 92% watch video-on-demand content*

80% play games online

87% use social media apps/sites

91% use messaging apps/sites

99% use video-sharing platforms (VSP)

60% use live streaming apps/sites

65% are aware of potential vlogger endorsements
(12-15s who go online)

49% are aware of ad placements in search engines
(12-15s who go online and use search engines)

31% have seen worrying or nasty content online
(12-15s who go online)



* Video-on-demand content includes subscription services such as Netflix, broadcast catch-up services such as BBC iPlayer, recorded TV, websites like Vimeo and YouTube, blu-rays/DVDs, and renting online such as from Google Play Store

Technology used in education is relatively new. Online education is something that in the wake of this pandemic has become the new way of delivering distance education. In the past, in order to communicate with teachers, we used letters, however, this is now somewhat outdated, nowadays letters have been replaced by computers, tablets, mobiles... which make the communication process faster, more direct, and simpler.

Today, as previously mentioned, we have gone from writing letters and giving lessons in an ordinary building, to having the possibility of receiving lessons online. In the wake of the pandemic, for a large majority of people, part of their classes has moved to the online format. Nowadays, being a student is not easy, as we are studying as well as working. That is why, by taking online classes, students, for the most part, can save time, money, the cost of transport, books... This really is a relief for a large part of the student population as we are given the opportunity to study despite the difficulties that may arise.

Another added value of online education is the intercultural dimension. Because the classes are online, students from all over the world have the possibility to follow them. This means that we are enriched by other people's views, i.e., a Malaysian student may be surprised by a Spanish student's view of a subject, or a Japanese student by a French student's view of a subject. In face-to-face classes, the main source of information would be the teacher, whereas with online education we allow students to be enriched by the input of others, learning, and discovering new aspects of education that the teacher may have left behind.

Regarding this point, many people have argued that debates are more entertaining face-to-face, which is true, but we must take into account that not all students have the same opportunities, be they economic, geographical or physical, which is why e-learning allows them to enjoy this type of activity.

Online education is gaining more and more weight in this globalized and interconnected world in which we live, which is why actors such as NGOs are gaining relevance.

NGOs use online education to enlarge their scope of impact, through online courses, which is why through this methodology they are able to reach a larger number of people, instead of reaching tens of people they can and do reach a larger number of people.

Online courses may be taken over a longer period as well. This reduces the pace of daily classes, allowing students to spend more time digesting what they've learned. Teachers may also have more detailed explanations.

So, while the effectiveness of online education is debatable, we cannot overlook the above-mentioned advantages. All people have the right to an education. And one of our key goals as educators, whether in formal or non-formal education, is to help broaden the boundaries of knowledge and information sharing.

1.2. What is E-learning?

Simply put, online learning is the opportunity to learn on a virtual platform. The most widely accepted method of learning entails a face-to-face meeting with an instructor in the classroom, during which they feed you information. This implies that you must physically attend a class at an educational facility (e.g., a classroom, a campus, etc.).

E-learning is the method of disseminating information via electronic books, CDs, webinars, and other means. It has transformed the traditional chalk-and-board technique of imparting knowledge to students.

E-Learning, on the other hand, makes giving and receiving easier, more prolific, and productive. Tutors use the most up-to-date technology to teach their students.

For tutors all around the world, e-learning has become a valuable tool. Previously, not everyone had access to knowledge.

Geographical barriers had made travel to other countries difficult for professors and students. This new practice has aided in ensuring that students receive consistent education.

Learners and teachers benefit from increased collaboration and worldwide opportunities provided by e-learning.

Tutors can earn money by designing and selling courses using numerous online sites and apps, such as (Digital Class World; Android App). Teachers are given extensive assistance in developing and marketing their courses.

In addition, the wages are pretty significant, which may make it possible to turn learning into a full-time profession. Students can pick and select whatever categories or topics they want to study about.

The relevance of e-learning education cannot be overstated in today's digital environment. The modern form of remote teaching is web-based learning and virtual classrooms.

As a result, it is reasonable to conclude that e-learning education should be adopted by a growing number of people.

1.2.1 Characteristics of E-learning

The main characteristics of online learning are efficiency, recognition, and technology. Efficiency, because online learning should allow students to focus

on different elements of their lives, such as working and taking certain courses at the same time. This means that students can be, in many cases, in different locations than their educators. Recognition, because a student who enrolls in an online course is no different than a student who enrolls in a traditional class. You should be eligible to graduate in that course and obtain a recognized document stating the same if you successfully complete the course and pass all of the related exams, just like the other students. As a result, regardless of whether you are an online learner or not, you will be able to take advantage of all the benefits associated with receiving the credential. And Technology, because unlike the alternative, taking an online course necessitates the use of specific technologies. For example, you'll need an internet-capable device, such as a laptop, smartphone, or even a desktop computer. This will enable your computer to attach to your course as well as the device of your instructor. You'll still need internet connectivity for this to function.

1.2.2 Types of E-learning

Following **Randy Conrad's** originator of the notion of E-learning and its several typologies, we can discuss the three most utilized varieties of this technique: Synchronous E-learning, Asynchronous E-learning, and Blended E-learning.

Synchronous e-learning: Synchronous e-learning, as the name suggests, is learning in which the teacher and students communicate at the same time. This means that both sides are exchanging information at the same time, thanks to digital technologies. There is an instructor who provides the information and leads the session, as well as many students, in this e-learning that is close to classroom-based learning. Since the classroom is interactive, students can attend from anywhere in the world with only a suitable laptop and an internet connection.

Internet chat and videoconferencing are examples of synchronous e-learning. Synchronous learning refers to any learning mechanism that operates in real

time, such as instant messaging, which enables students and educators to ask and answer questions in real time.

Apart from the fact that the activities take place in real time, another feature of the presented e-learning type is that the synchronous communication is not restricted to a specific number of people. At the very least, at least two people must be present at the same time to communicate. There is no such thing as a maximum cap. Five, twenty-five, a hundred, or more people will participate in synchronous e-learning.

Students enrolled in synchronous learning courses will watch live-streamed lectures and participate actively. During the knowledge exchange, they will communicate with the mentor and ask questions, get additional details, and explain examples. Participants in this form of e-learning may communicate with their peers in real time. They will share outside sources of knowledge, seek advice or assistance, and actively express their opinions on course topics. Self-motivated participants would have the ability to delve deeper into the topics through peer-to-peer networking and information sharing.

Live communication between participants is one of the key benefits of synchronous e-learning. Instant feedback implies real-time interaction, and real-time interaction enables learners to get answers to their questions right away. This is beneficial since certain people need additional descriptions, quantitative details, and examples in order to fully comprehend new information.

Another advantage of immediate feedback is that it allows trainers and instructors to make necessary adjustments. The mentor will consider challenges the community faces throughout the learning process and find the best way to present the curriculum based on their interpretation of the online course materials.

One of the most well-known benefits of synchronous e-learning is that it is a highly motivating method of acquiring new information. Individual participants can feel more inspired and eager to learn when they are part of a community. This is due to the competitive spirit that emerges. When competing and participating in team e-learning, students may use performance goals to motivate them to demonstrate and improve their skills and abilities (e.g. e-learning games).

A synchronous learning experience also improves learning because real-time experiences can be more exciting than learning alone. Learners and educators agree that this form of e-learning is more interactive because learners do not feel like they are interacting with a machine alone, but rather as members of a group.

Synchronous e-learning has many advantages in terms of the learning process, but it also has flaws.

The high reliance on technology is one of the most common drawbacks of synchronous e-learning, though this is true of online learning in general. This means that in order to participate in a webinar, live chat, or conference, we must first have a suitable computer. The second, and more serious issue, is that people do not have adequate programming skills to participate in an e-learning platform.

They may become frustrated and discouraged due to a lack of technical expertise and inability to manage the various technologies involved in synchronous e-learning.

Asynchronous e-learning: The other common form of online learning is asynchronous e-learning. The key difference between synchronous and asynchronous e-learning is the absence of a live component. This suggests that the tutor and the learner are not interacting at the same time. And if one of the involved sections is offline, synchronous learning can be performed.

Asynchronous e-learning can take the form of a virtual classroom, just like synchronous e-learning, but without the need to meet at a set time. Authoring tools such as Adobe Captivate, Articulate Storyline, Lectora Inspire, and others are used to create courses. This training, unlike synchronous learning, is provided online, that is, through the internet.

The high degree of versatility and independence that asynchronous e-learning offers is one of its most significant advantages. As previously stated, the learner chooses where, when, and how much time to devote to learning. The good news is that you can work through the materials in asynchronous e-courses at any time of day or night. You can customize your learning schedule to suit your lifestyle.

Another advantage is that there is no need for participants to meet in a physical location. As a result, asynchronous e-learning is often referred to as Location Independent Learning (LIL). Since it is adaptable, asynchronous e-learning is ideal. Learners vary from one another in terms of their learning speed.

This e-learning approach overcomes the time barriers imposed by time differences more effectively. It helps students to communicate with their peers and an online facilitator regardless of their time zone. Discussion boards, blogs, and emails are often accessible to ensure that online contact is successful and that conversations can take place regardless of distance or location.

Introverted learners will benefit from asynchronous e-learning. They are unconcerned with social relationships and interactions, instead focusing solely on the process of learning. They are relaxed and at ease. There is no sense of being isolated from the group or being overshadowed by more dominant and vocal peers.

Blended e-learning: Blended e-learning is perhaps the most widely used form of learning around the world. For certain educators, it is something they are incorporating or have already done effectively in their work, but for many others,

it is still a novel and little-known approach. It is, at its heart, a hybrid of asynchronous and synchronous forms of e-learning, hence the term. This method combines elements of both forms of e-learning previously described. It's also known as blended or mixed e-learning.

Over the years, there have been several different meanings, and people don't always agree on them. Many of them are heavily reliant on technology, relying on a combination of online and offline jobs. However, most people think of blended learning as a combination of online and face-to-face lessons. While technology has long been used to aid learning, the mainstream concept of blended learning as a combination of technology-assisted learning and face-to-face learning possibly originated more seriously in the late 1990s with the widespread adoption of CD-ROM-based and then online courses.

Platforms and implementations for blended e-learning grow in tandem with technical advances and cumulative experience.

Face-to-face lectures and presentations, the use of multimedia materials, paper-based tests, and community activities have all been components of teaching for many years. Technological advancements in the last 20-30 years have increased learning opportunities. All of these methods are combined in blended e-learning.

It's all about incorporating information and communication technology (ICT) into learning programs to improve the overall experience for both students and instructors.

Teachers and tutors also struggle to make lessons appealing and exciting for students. One of the biggest advantages of integrated e-learning is that it brings together technology and learning in one environment. The IT generation has become so used to using laptops, cell phones, and tablets that most students find it difficult to learn without them. Learning has become more rewarding and

less of a chore as a result of their inclusion. It is giving traditional education a new lease on life.

Blended e-learning saves a lot of time. All learning materials are collected in one location, such as a shared workspace or a cloud service that can be accessed from any computer.

There are many benefits to blended e-learning, but one major drawback remains: the reliance on technology. You can learn from anywhere, at any time, and for as long as you want, but you will still need a computer, tablet, or other "smart" device with Internet access.

This aspect of the coin is easily overcomeable. The flip side of the coin presents a greater challenge. For several people, varying levels of IT literacy may be a major obstacle. The availability of solid technical support and qualified trainers is a viable option, but it is not always the case.

There are disadvantages, but they are not insurmountable. Negative factors can be reduced to a minimum, and attempts can be made to turn them into positive outcomes. For a group of people with a variety of skill sets and opportunities, blended e-learning may be an important way to learn. The trick to ensuring that this form of e-learning is the most appropriate is to figure out what works best for you and your learners.

Game Based E- learning: With the rapid advancement in technology in the last 20 years, game-based e-learning has become more common. It's a method of learning that takes the shape of a game. It employs a variety of tactics to encourage students to learn. One way to inspire them to learn more is to make them compete against each other or to make them test themselves. Game-based e-learning has its own set of characteristics, and not all games can help students achieve their learning objectives. The competitive nature of an operation is one of the key characteristics that distinguishes it as a GBL.

The engagement phase is the next crucial component. Players do not want to leave the game until it is over because they have enrolled. When a child is playing a game that engages their curiosity and creativity, for example, the learner is not worried about the learning process.

Finally, there are the prizes that players earn right away. They are a way to recognize that goals have been reached, whether in the form of victory points or medals. This is necessary to keep the learner interested and returning for more, as well as to aid the learning process.

Video games make up the majority of e-learning games. This can be played on the Internet, on personal computers, or on television-connected game consoles. They appeal to you because of their nature and the feeling you get when you play them – you feel like you're a part of the game.

Game-based learning is particularly well suited to subjects that are difficult for students to "digest" in general, such as science. Students are more likely to learn when the resources are presented in a game-like environment.

For a variety of reasons, game-based e-learning is useful. For starters, it expands memory space. Many of the games are structured in such a way that learners must use their memory to overcome obstacles. Second, most games necessitate quick thought and decision-making. Some logical steps are often used, requiring the players to use their logical reasoning to progress. Furthermore, game-based e-learning promotes digital literacy, which is widely recognized as a critical ability for a lifetime of technology use. Learners also gain the ability to think creatively and plan a few steps. When opposed to book learning, the game-based learning experience results in higher retention rates.

One of the most difficult issues is that the aspect of fun and interaction may often take precedence over the learning objectives. Learning resources are minimized, and the focus is shifted to entertainment. Another issue is that it is

difficult to find a suitable method for creating a successful e-learning game and designing it appropriately to suit the needs of the learners.

The fact that successful e-learning games require complex, often very costly methods make the process of integrating game-based learning into educational systems more difficult.

1.3. The shape of digital learning: platforms, tools, techniques, and methodologies.

E-learning platforms with a broad variety of courses, belonging to universities or private educational centers, as well as educational startups, tools that enable to apply this new style of learning, e-learning... are just some of the forms that digital education takes to be made available to us.

That is why, in this research, we have placed a high value on the tools and e-learning platforms that were developed during the COVID pandemic and that continue to evolve in an increasingly interconnected society.

The Danish Youth Team has been working in depth on E-learning platforms and MOOCS in the non-formal education sector, which is one of the organizations that contributed to this research. A path has been created that handles the various approaches, in this case platforms and MOOCS, that aspire to expand within the digital sector as well as the education sector, with e-learning education taking center stage.

The Xul Foundation, on the other hand, conducted an extensive search of the most extensively used instruments in the non-formal education sector. The tools were divided into eight categories: videoconferencing and meeting tools, gamification, and group dynamisation tools, document and presentation production tools, participatory process development tools, visual narrative tools,

cartographic and temporal narrative tools, data visualization and organization tools, and website creation tools.

Other organizations, such as Marketing Gate and CODEC, analyzed Digital Tools and Online Platforms aimed at young people and youth workers and built a database of the many digital platforms accessible at the European and local levels. In addition, current practices on virtual learning mobilities and Erasmus+ digitization projects in partnering countries have been collated, allowing us to appreciate the various actions that countries have done in this pandemic setting.

We've explained the role of each tool, the price, the difficulty of using it, and how it might aid learning in each of these areas... so that those interested in using them can choose from a variety of possibilities which one is most suited to their needs, providing them with a wide range of options.

Technology is now a modifier that impacts all domains of labor and not only causes an effect of change, but also a transformation that is unavoidable, no matter how slow or fast it occurs. Technology gives rise to digital tools. The goal of these tools is to help us put the benefits of this transition to good use and to take advantage of the new opportunities they provide.

As a result, digitization of processes in all fields of work entails not only being aware of the most up-to-date information, but also being aware of the external factors that influence and improve performance in all of these domains.

A digital tool refers to resources in the context of computing and technology and is typically composed of software programs that allow us to interact and develop, as well as devices (hardware) that, when used together, allow us to use the tool.

To choose which digital tools are best for your aim, consider where you require assistance, support, or progress. You will be able to build easier routines for yourself, as well as more efficient work coordination and student management. Specific purposes vary, but some may be to speed procedures, facilitate activities, serve as a timeless form of communication, and provide educational spaces for virtual aid, modify, or make learning processes more interesting, independent of location or distance.

Other advantages of digital tools include cloud storage, which makes group and individual work more efficient, as well as greater productivity due to the lack of time and space constraints.

The use of these tools is required, as is adaptation to them, because the instructor must be as up to date as the student, and information flow between the two must be as simple and effective as feasible.

1.4. European digital education projects

The European project platforms Erasmus+ and Salto, which provide detailed information on a significant number of projects using digital learning, were examined in order to better understand how digital learning is being used in the field of non-formal and informal education in Europe. We've also collated the best practices in this field from the partnership's members. Finally, a brief examination of the pandemic's impact on the digital learning sector was conducted.

1.4.1 Erasmus + and SALTO

Erasmus+ is the EU's education, training, youth, and sport programme for the years 2021-2027. Education, training, youth, and sport are all important areas for

citizens' personal and professional growth. High-quality, inclusive education and training, as well as informal and non-formal learning, provide young people and participants of all ages with the qualifications and skills they need for meaningful participation in democratic society, intercultural understanding, and successful labor market transition.

Building on the program's success from 2014 to 2020, Erasmus+ redoubles its efforts to expand the opportunities available to more people and organizations while focusing on its qualitative impact and contributing to more inclusive, cohesive, greener, and digitally fit societies.

In a continuously changing society that is increasingly mobile, multicultural, and digital, European individuals must be better equipped with the knowledge, skills, and competences required. Spending time studying, learning, and working in another country should become the norm, as should speaking two languages in addition to one's mother tongue.

The European Commission is ultimately responsible for the Erasmus+ Program's implementation. On an ongoing basis, it administers the budget and establishes priorities, targets, and criteria for the Program. It also directs and oversees the Program's overall execution, follow-up, and evaluation at the European level. The European Commission is also in charge of the overall monitoring and coordination of the national entities in charge of implementing the Programme.

The European Commission's European Education and Culture Executive Agency (EACEA) is in charge of implementing several Erasmus+ Program actions at the European level.

Aside from other bodies, Resource centers and information offices also implement the Erasmus+ programme:

The SALTO Resource Centers' mission is to increase the Erasmus+ programmer's quality and effect on a systemic level by providing knowledge, resources, information, and training activities in specialized areas for National Agencies and other actors involved in education, training, and youth work. Organizing training courses, seminars, workshops, study trips, forums, cooperation, and partnership-building activities on Erasmus+ priority areas are only a few of these activities.

In addition, the SALTO Centre's work in the fields of education and training includes:

- enables stakeholders to, among other things, develop their organizations' capacities to fully exploit Erasmus+ opportunities, share best practices across European countries, find partners, or increase the impact of their projects at the European level.
- provides a platform for European training activities.

The work of the SALTO centers in the sphere of youth also includes:

- promoting the acknowledgment of non-formal and informal learning; establishing and documenting strategies and instruments for training and youth work.
- through the European Training Calendar, providing an overview of European training programs available to young workers.
- releasing useful publications and guidelines.
- offering up-to-date information about youth work throughout Europe.
- offering a database of youth work and training trainers and resource people.
- facilitating the implementation of Youthpass, a tool for validating non-formal and informal learning results in youth mobility and work activities.

In the sphere of youth, SALTO centers are either thematic (participation and information, inclusion and diversity, training, and cooperation) or geographical

(Eastern Partnership Countries and Russia, Southern Mediterranean, Western Balkans) in nature.

1.4.2. Best practices among partners

As all aspects of society become more digitally connected, an ever-increasing amount of information and knowledge is becoming nearly ubiquitously available. Technology and content are becoming increasingly impossible to disentangle in an era of cloud computing, blended learning, streaming, and subscriptions to licensing for constantly updated software. This means that facts no longer must be remembered by heart in the field of education, which includes school education, vocational training, and higher education. Instead, they may be accessible instantly utilizing mobile devices. Much of the information that people used to have to memorize and remember may now be saved digitally and accessible whenever they need it, from practically anywhere.

Good practices have been gathered from the various partners involved in this study. This study enlisted the participation of six organizations from around the world: Association for European Cooperation Development and Communication from Belgium; “Danish Youth Team” from Denmark; Associazione Inco Interculturalita & Comunicazione and Associazione InCo (main project coordinator) – Molfetta from Italy; Association for research, education, and development “Marketing Gate” from North Macedonia; “Obcianske Zdruzenie Keric” from Slovak Republic and Fundacion XUL from Spain.

The good practices that concern each of these associations have been collected among the many tasks completed, ensuring a broader spectrum. Each of these organizations has highlighted good practices that have been created online and have contributed to e-learning on a national level.

1.4.3. Best Practices During the Pandemic

As the COVID-19 pandemic has demonstrated, education is more important than ever in guaranteeing a quick recovery and promoting fair opportunities for all. As a result, good practice has been critical in completing the numerous initiatives that appeared to have stagnated with the arrival of the epidemic.

The pandemic has had a negative impact on youth work organizations and the youth work community (trainers, youth workers, facilitators, and moderators): travel and gathering restrictions, lockdowns, curfews, border closures, and limited access to public spaces have all had an impact on their projects. The inability to perform self-financing and fundraising operations, as well as the constraints and reallocation of existing finances, have had a significant influence on youth work. According to studies, there is a severe scarcity of funds and challenges in funding administrative and daily activities, resulting in project, activity, and employee cost reductions. Learning mobility will inevitably reflect the negative repercussions of youth work: there will be fewer organizations and workers, as well as less options for mobility initiatives. Youth organizations that go dormant for a long length of time risk losing their social capital and networks.

Youth workers have significant challenges as well. Economic issues are fairly common as a result of a loss of income or employment. Furthermore, the youth work community requires time, support, and guidance in order to deal with the pandemic's effects and changes in the field of youth work. Going online, for example, through virtual exchanges, necessitates learning new skills and developing digital competencies in order to prepare for functioning in the new environment.

The covid-19 pandemic and related lockdown measures have caused substantial disruptions in the lives of young people, the consequences of which are still being assessed and understood.

Transitions to maturity and autonomy are one aspect of youth study that examines changes in young people's lives. When young people grow up, they may move to education, employment, economic and financial independence, or the formation of their own family, or the opportunity to vote...

All these transitions have been called into doubt by Covid-19. While there is an endeavour to discover the best ways to deal with the crisis and chronicle these practices on the one hand, there is also a recognition that we are entering a longer era of new normality with which young people will have to contend.

Policymakers, practitioners, youth organizations, and platforms for young people's participation, as well as youth researchers, are all affected by this new protracted transition. While there is a clear emergence of digital youth work and increasing use of digital tools in working with young people in both formal and non-formal education across Europe, there is also an understanding that there are unmet needs of young people, leaving many to face their own issues related to social exclusion, discrimination, and a redefinition of social antagonism. Changes in relationships and behavior, as well as perspectives on friendship and community, impact on well-being and mental health, work, engagement, activism, youth organizations, and many other aspects of young people's lives, are all on the table.

The epidemic has been difficult, making it impossible for us to carry out the various programs and activities that we had planned. However, while it may appear that everything it has brought us has been unpleasant, we will discover that this is not the case through several polls conducted among the study's partners.

We will see that, even though everything was difficult until we became accustomed to the new online modality, the various partners were able to move forward and learn from the new modality that was presented to us, gaining knowledge in the digital field, and overcoming the pandemic's challenges.

1.5. Policy recommendations

What do educational authorities have to say about digital learning? If we wish to develop non-formal or informal digital education efforts, we must consider policy proposals offered by European institutions, educational institutions, and research centers.

The European Parliament has drafted a set of recommendations to ensure that e-learning education is implemented properly and effectively. To begin with, the European Commission's Digital Education Action Plan (2021-2027) outlines the European Commission's vision for high-quality, inclusive, and accessible digital education in Europe. It is a plea for further European cooperation in order to:

- taking lessons from the COVID-19 crisis, in which technology was deployed on an unprecedented scale for teaching and training.
- integrating educational and training systems into the digital era.

The new action plan has two strategic priorities:

1. Fostering the development of a high-performing digital education ecosystem.

This requires:

- digital infrastructure, connectivity and equipment
- planning and development of effective digital skills, including up-to-date organisational capabilities

- teachers and education and training staff with digital skills and confidence
- high quality learning content, user-friendly tools and secure platforms that respect privacy and ethical standards.

2. Refining digital competences and skills for digital transformation.

This requires:

- basic digital skills and competences from an early age: digital literacy including the fight against misinformation, computer literacy and good knowledge and understanding of data-intensive technologies such as artificial intelligence.
- advanced digital skills that generate more digital specialists and ensure that girls and young women are equally represented in digital studies and careers.

On the other side, the European Parliament has made a number of proposals aimed at improving the digital skills and competencies required for a successful digital transition.

Society and the economy have been revolutionized by digital transformation, which is having an ever-increasing impact on everyday life. However, until the COVID-19 epidemic, it had a far smaller impact on education and training. The epidemic has proven the importance of establishing an education and training system that is digitally compatible. While COVID-19 proved the need for increased digital capacity in education and training, it also exacerbated a number of existing difficulties and inequities between those who have access to digital technology and those who do not, particularly among those from poor backgrounds.

The pandemic has intensified a long-term trend toward online and hybrid education. This transition has revealed new and inventive ways for students and educators to organize their teaching and learning activities online, as well as engage in a more personal and flexible way. These developments necessitate a concerted effort at the EU level to support education and training systems in order to solve the difficulties recognized and exacerbated by the COVID-19 pandemic, as well as a long-term vision for European digital education.

1.5.1. Digital Education Action Plan (2021-2027)

- In accordance with the European Pillar of Social Rights, a rights-based approach to digital education must be the driving principle in digital education policy to ensure that everyone's right to an inclusive and high-quality education is realized. Emphasizes the need to link digital education policy to other policy areas to build a more inclusive, gender-balanced, inventive, and greener society, and that the post-pandemic recovery and revitalisation of education policy is intimately related to other difficulties the Union and the globe are confronting.
- As a first step toward a more complete digital skills and education strategy, welcomes the updated Digital Education Action Plan and its expanded scope and ambition, with specific targets addressing persisting gaps in digital skills, the promotion of excellent computer and IT education, or better connection in schools; considers the Plan a success if, by the end of it, digital education has truly become part of education policy across the Union, with clear, consistent, and positive results in terms of availability, access, quality, and equity; recognizes the different starting points of Member States in this process, which should be factored into the Plan's roll-out;
- Applauds the decision to align the Plan with the 7-year multiannual financial framework (MFF), which allows for a longer-term perspective and

connects it to relevant financing instruments; emphasizes the importance of the Plan in delivering the European Education Area, and the European Education Area in delivering the Plan, which should provide openness and accountability;

- However, effective implementation of the Plan requires coordination across a wide range of programs and among Member States; calls on the Commission to guarantee effective synergies between the various programs, as well as more consistent and effective coordination across all relevant EU digital education policies, in order to reduce fragmentation and minimize overlaps between national and European financing instruments and policies, and therefore increase impact;
- The European Structural and Investment Funds, the Connecting Europe Facility, Horizon Europe, the European Solidarity Corps, Creative Europe, and Erasmus+ have all contributed to the funding of various aspects of the Plan; supports the greatly increased budget for the Erasmus+ programme, but cautions against overburdening it with new policy aspirations, considering that the program's primary goal must be to increase its inclusiveness;
- In the Recovery and Resilience Facility, the 'Connect' and 'Reskill and upskill' investment priorities are critical for promoting the digital education agenda; encourages Member States to devote at least 10% of the Facility's resources on education; Reiterates its call for Member States to considerably enhance public spending on education, recognizing the critical role that education plays in driving growth, creating jobs, and increasing economic and social resilience; reminds Member States that at least 20% of the funds available under the Recovery and Resilience Facility (RRF) have been set aside for the digital transition, and encourages them to use the funds to improve the digital capacity of education systems and invest, for example, in digital infrastructure for schools, pupils, and vulnerable groups, particularly in excluded communities.

- Highlights the importance of pilot projects and preparatory actions (PPPAs) established by Parliament in assuring more Union-wide cooperation to address educational gaps between Member States, regions, and rural and urban areas, such as the new preparatory action targeted at boosting access to educational tools in places and communities with low connection or access to technologies; asks for more Union-wide cooperation to address educational gaps between Member States, regions, and rural and urban areas; in this regard, supports the inclusion of a media literacy action in the new Creative Europe programme, which builds on the successful 'Media literacy for all' pilot project and preparatory action, and begs for adequate funding to ensure the new action's effectiveness;
- Notes that the new Plan establishes concrete goals to eliminate chronic digital education gaps, such as in connectivity, digital skills, and online learning materials; applauds the Commission's planned mid-term evaluation of the plan, as well as its aim to increase data gathering; demands that the Commission build a comprehensive monitoring mechanism for all digital education measures, which will be used to exchange best practices across the EU and inform the mid-term review; Reiterates the importance of presenting both Parliament and the Council with a clear implementation timeframe as well as specific benchmarks and milestones; calls on the Commission to establish a forum bringing together Member States, Parliament, and other relevant stakeholders and experts, including education providers and civil society organizations, to monitor developments and performance on an ongoing basis; is persuaded that the plan requires a clearer governance and coordination framework, in which Parliament should be involved, to monitor developments and performance on an ongoing basis;
- Demands that the Commission expand the role and visibility of education, particularly digital education, in the European Semester exercise, and

include references to the economic impact of education, as well as social aims and educational quality, in its focus; Member States will emerge from the Covid-19 crisis with historically high debt levels; observes that the classification of education as expenditure in national accounting has sometimes resulted in significant cuts in education budgets during previous crises; emphasizes that the digital transition in education will not be possible without significant investment;

- Notes that the Covid-19 problem has highlighted the need for Member States to better coordinate digital education policies and measures, as well as share best practices through a multi-stakeholder approach to education policy, in order to guarantee that it fulfills the requirements of EU citizens and puts learners first; as a result, the Commission's pledge to build a European Digital Education Hub as a first step toward a co-creation process and continuing monitoring system that connects national and regional digital education policies and incorporates important stakeholders and experts, including civil society organizations, representing multiple approaches from inside and outside mainstream education, is warmly welcomed; considers that the new hub provides a channel for Member States to promote cooperation between education and training institutions in order to improve digital education provision; applauds the ambition to use the hub to establish a strategic dialogue with Member States on the key enabling factors for successful digital education in light of a Council Recommendation; asks the Commission to act rapidly to bring the draft Recommendation's publication date forward to 2021;
- Calls on the Commission to supervise implementation at the national level while maintaining the concept of subsidiarity, and to ensure fair representation and independence within the hubs and advisory services, as well as in stakeholder dialogue; calls on the Commission to fully involve Parliament in expanding European and national hubs and advisory

- services, as well as in nominating relevant stakeholders; reminds the Commission to avoid overlap and duplication with the hub's goals when developing the concept for the planned European Exchange Platform;
- Underlines the importance of the European Union serving as a global model for high-quality digital education and urges the Commission to collaborate closely with relevant global and regional organizations and stakeholders to increase worldwide access to high-quality digital education.
 - Applauds the Commission's awareness of the critical role of research in implementing the strategy and attaining effective and suitable digital education for all; calls on the Commission and Member States to increase their investment in interdisciplinary research to examine the long-term effects of digitalisation on learning and the efficacy of digital education policies, thereby informing their future design and implementation, notably by predicting new types of jobs and skills and adapting education curricula appropriately; emphasizes the need for continual research into the varied implications of digital technologies on children's education and development, combining education sciences, pedagogy, psychology, sociology, neuroscience, and computer science in order to gain a deeper knowledge of how children's - and adults' - minds respond to the digital environment and the associated digital education.

1.5.2. Enhancing digital skills and competences for the digital transformation

- Believes that modernizing existing curricula and learning and teaching methods must go hand in hand with embracing and utilizing the possibilities of digital technologies; in this regard, emphasizes the importance of providing financial support for teacher training courses; demands, therefore, that greater attention be paid to accessible teacher training as the plan is implemented, to ensure that teachers and educators not only possess, but can also teach, digital skills; urges

teachers and IT workers desiring to teach to invest in specialty courses in digital teaching skills; emphasizes the benefits of mentorship as a training and development strategy; emphasizes the importance of Erasmus+ and teacher mobility in the development of skills; notes the potential of the future Teacher Academy and requests that the Commission submit a clear proposal and funding to the Parliament; recognizes special digital difficulties such as asynchronous learning and the significance of fostering critical engagement, and calls for a pan-Union commitment to develop new pedagogical and evaluation approaches for the digital world.

- Highlights the growing importance of parents, families, and tutors in distant learning, as well as the need for them to have solid internet, digital, and technical skills, as well as the necessary equipment, and asks for particular training and support systems for them; calls on the Commission to conduct a dedicated research on digital parenting to develop a consistent and effective approach across Member States to help parents calls on the Commission to conduct a dedicated research on digital parenting to generate a consistent and effective approach across Member States to help parents;
- Harmful and illegal content and activities in the digital environment, including in terms of mental health and well-being, such as online harassment, including cyberthreats and cyberbullying, child pornography and grooming, data and privacy breaches, dangerous online games, and disinformation, are highlighted; as a result, enthusiastically supports the revised plan's increased emphasis on digital and information literacy through education and training; believes that healthcare professionals, educational institutions, civil society, and non-formal education providers, in collaboration with parents, must develop an age-appropriate curriculum to enable learners to make informed and appropriate choices while avoiding harm;

- Reminds individuals that having the tools and abilities to navigate the numerous challenges in the digital environment, particularly to recognize and critically evaluate disinformation and fake news, is crucial; in this context, the Commission should examine the Code of Practice on Disinformation on a monthly basis and take necessary measures to guarantee that social media fights online disinformation, as well as the recent Media Action Plan's focus on media literacy; anticipates the intended rules for teachers and educational personnel on promoting digital literacy and countering misinformation; urges on the Commission to be more bold in launching large-scale digital literacy programs in collaboration with national and local partners; emphasized the necessity of spreading current programs such as EU Code Week and Safer Internet Day extensively;
- To avoid any commercial exploitation of learners' data, any advancement in the field of digital education must be accompanied with a strong data protection framework; emphasizes that minors' data must be treated with the utmost care, particularly for research and educational reasons; calls on the Commission to address the unique nature of educational data and data belonging to children and learners in collaboration with the European Data Protection Board (EDPB);
- As part of attempts to teach digital skills and literacy, such as through large-scale digital literacy campaigns, traditional, humanistic, and soft skills, such as social skills, empathy, problem-solving, and creativity, should continue to be developed; highlights the importance of the digital dimension of citizenship education and regrets the new Digital Education Strategy's modest objectives.
- Recalls the importance of advanced digital skills and encourages Member States to establish national education programs to boost the number of IT students and graduates; emphasizes that such classes might be developed under the auspices of high-tech firms and institutions;

- Highlights the importance of environmental education and advocates for the development of specially designed curriculum across Europe that take the environmental impact of digital education into account;
- Companies deploying new and emerging technologies have a responsibility to provide adequate reskilling and upskilling to all employees affected, in accordance with the European Social Partners' Framework Agreement on Digitalisation, so that they can learn how to use digital tools, adapt to changing labor market needs, and stay in employment; emphasizes the role of social partners in recognizing skills needs, providing on-the-job training, and updating education and training curricula through collective agreements on the definition and regulation of digital skills and continuing training; highlights the pandemic's new working realities, such as teleworking, and encourages educational and training institutions as well as companies to provide appropriate training to educate workers for this new working environment;
- Underlines the importance of digital skills evaluation and monitoring and highlights the relevance of existing tools such as the European Digital Competence Framework and the SELFIE self-assessment tool in this regard; applauds the extension of SELFIE to schools; and urges the Commission to increase the currently low uptake of such tools.
- Applauds the idea to produce a European Digital Skills Certificate as a tool to promote validation and portability in line with the Digital Competence Framework; emphasizes the need for better, more innovative recognition, validation, and certification - and thus portability - of digital skills, qualifications, and credentials; To prevent duplication and overlap with current schemes, the scheme must be created in close collaboration with the Member States; Demands that the Certificate be included into Europass and, maybe, the forthcoming European Student Card;

- Applauds the Commission's initiatives to digitize education and certifications, such as the new Europass platform and the upcoming Europass Digital Credential Infrastructure; at the same time, calls attention to the need to improve the operation of the Europass platform in terms of searching for and receiving job and course offers, to make timely changes to the platform's information about current courses, training, and employment offers, and to identify the institutions responsible for this process; calls on Member States to better promote the new Europass platform in educational and training institutions, as well as among their employees and employers;
- Underlines the importance of improving digital resources, methods, and mechanisms at the Union level to provide all people with access to lifelong learning opportunities and high-quality higher education courses and materials; recognizes the emergence of a new, transnational digital environment and market for higher education, as well as the need for European higher education institutions to remain relevant and succeed in this context; call on the Commission and Member States to establish a framework for diverse, multilingual distance and online education materials and programs to be accessible across Europe via an Online European University;
- Recalls the critical significance of VET (Vocational Education and Training) and adult education in offering lifetime learning opportunities for reskilling and upskilling; appreciates the Council's recommendation on VET for long-term competitiveness, social equity, and resilience, as well as its overarching goals of modernizing EU VET policy, streamlining European cooperation, and simplifying VET governance; calls on the Commission to take a holistic approach to VET and adult learning that includes formal, non-formal, and informal learning and allows learners to acquire a diverse range of skills that are critical for the digital and green transitions, contribute to social inclusion, active citizenship, and personal

- development, and allow people to adapt to a shifting labor market; emphasizes the necessity of acquiring green skills;
- Highlights the challenges that VET institutions that rely on hands-on training face in adapting to the digital environment; calls for adequate solutions and adequate funding to ensure that VET education is delivered effectively; applauds the planned expansion of the Digital Opportunity traineeships to VET learners as well as teachers, trainers, and educational staff;
 - Recalls that acquiring digital skills is a lifelong process, and that programs should target all populations, not just those of working age; This necessitates a multi-sectoral, holistic approach to education, based on the premise that learning occurs both inside and outside of compulsory school, and that it commonly occurs in non-formal and informal settings; therefore, the Commission should factor in various degrees of technical advancement between education sectors and institutions, as well as pay special attention to harder-to-reach places and groups when developing recommendations and guidelines; calls on the Commission to factor in differing levels of technological development between education sectors and institutions and to pay special attention to harder-to-reach areas and groups when developing recommendations and guidelines; calls on the Commission to factor in differing levels of technology development between education sectors and institutions and to pay special attention to harder-to-reach areas and groups;
 - Warns that early childhood social and educational inequities have a negative influence on educational performance and employment chances later in life; emphasizes the importance of early access to excellent education and increased efforts to improve digital and media skills; appreciates the European Commission's news that a European Child Guarantee will be introduced to combat child poverty; urges Member States to set aside a considerable portion of the European Social Fund

(ESF+) resources for the implementation of the Guarantee, particularly to support targeted initiatives and structural reforms that effectively address children's poverty and social exclusion; notes that lower educational achievement is frequently associated with lesser digital proficiency, and hence appreciates the recommendation in the strengthened Youth Guarantee that those who are not in education, employment, or training undergo a digital skills assessment and get training; Notes the ESF+ program's promise to encourage lifelong learning;

- Insists on the need to bridge the digital divide, recalling that lower-skilled adults, people with disabilities, people from vulnerable or marginalized groups, older people, and people living in remote or rural areas should all have access to high-quality digital education and content, as well as improve their digital proficiency; according to the report, only 4.3 percent of low-skilled individuals accessed any sort of adult learning in 2018.
- As a result, deplores the plan's persistent lack of initiatives aimed at lower-skilled adult learners and the elderly; emphasizes that this omission weakens digital education's crucial lifelong learning dimension and stymies efforts to ensure that everyone has essential life skills; calls on the Commission to collaborate with national, regional, and municipal governments to put in place additional measures to incentivize adult digital education by making it available and accessible, ensuring that people who have completed their formal education are prepared to live and work in the digital world and can fully benefit from and contribute shape the digital transformation;
- Insists on the development of policies to ensure that persons with disabilities have the same opportunity and access to high-quality digital education as everyone else; encourages Member States to collaborate with organizations that represent people with a variety of disabilities to examine the challenges and opportunities presented by digital

- education, as well as to consider the specific needs of people with disabilities when developing effective digital education policies.
- Asks the Commission and Member States to discover and fund particular features for digital education that are tailored to the needs of people with disabilities; believes that digital education provides excellent chances for individuals with cognitive disabilities since it enables for customized pedagogical approaches to their various capacities; More funding is needed to provide the support that these groups have sorely lacked in the past;
 - Underscores the need of gender mainstreaming in education, skills, and digitization policies, as well as in the action plan; believes that digital education may help girls and women participate more fully in the digital era; argues that the digital gender gap is a sociological, economic, and cultural issue, and urges the Commission and Member States to address it through a multi-level, holistic policy approach; salutes the Commission's "Women in Digital Scoreboard," emphasizing the importance of collecting data broken down by gender and age to better understand the digital gender divide;
 - Stresses the importance of focusing on improved inclusion of females in digital education from a young age; emphasizes the need for a concerted effort to promote and motivate more girls to study STEM and STEAM subjects, as well as to pursue coding, computing, and ICT courses at school and university; emphasizes the need to encourage and enable women's entry to high-tech and digital industries, as well as battle the gender pay gap with sufficient methods and resources, as the gender disparity in education spills over into the job market;
 - Considers it critical to foster a positive and inclusive environment that encourages female role models in order to encourage girls to pursue STEM, STEAM, and ICT disciplines, as well as to combat unconscious prejudice and gender stereotypes in subject and career choices; believes

that the private sector can help establish effective initiatives and campaigns in this area by working with educational and training institutions, NGOs, and other civil society organizations; lauds the "Women in Digital" Task Force and the "Digital4Her" project of the European Commission;

2. EXPERIENCES AND INITIATIVES OF DIGITAL EDUCATION IN EUROPE

2.1. Brief national contextual on e-learning initiatives in partner countries

Owing to the progressing digitalization of all parts of society, an ever-increasing amount of information and knowledge is becoming almost ubiquitously available. In a time of cloud computing, blended learning, streaming and subscriptions to licenses for continuously updated software, technology and content are increasingly difficult to separate. For the field of education, defined as encompassing school education, vocational training and higher education, this implies that facts no longer have to be learned by heart – instead, they can be immediately accessed using mobile devices. Much of the knowledge people had to learn by heart and retain themselves can today be stored digitally and retrieved as needed, at short notice and from almost anywhere (Cedefop, 2019).

The digital transformation of the European society more generally is fully underway. New technical and 'soft' skills are gaining in importance both in the labour market and as a means for fully participating in society. As a result, traditional roles, content, and methods of education are being challenged – education today needs to prepare students for changing tasks and roles both in the labour market and as European citizens. Simultaneously, today's adults need reskilling and upskilling opportunities to enable them to tackle tomorrow's challenges.

Rethinking education in the digital age should become a central matter for today's policymakers for two reasons: (Braun, März, & Fabian Mertens, 2020, p. 1)

- First, only education can form a skilled workforce that is prepared for future jobs and a changing labour market. Rethinking education in the digital age therefore constitutes a prerequisite for Europe's future global competitiveness.
- Second, only education can provide the preconditions for the social inclusion and equal participation of European citizens in a digitalised

democracy. Rethinking education in the digital age therefore matters for safeguarding European values such as equality, democracy, and the rule of law.

Education in the digital age includes but is not restricted to digital education, and encompasses the transmission of technical, 'soft' and citizenship skills, and refers to both formal and non-formal education throughout European citizens' entire lives.

Existing Non-formal education (NFE) systems and frameworks still tend to be underestimated and insufficiently validated despite their tremendous significance in times of major economic change & COVID-19 pandemic.

By harmonising and simplifying its recognition, both the value and quality of NFE could be increased, the reskilling and upskilling urgently necessary in the digital age could be accelerated. Promoting the coordination of existing structures into a single system including a simplified and harmonised certification process, including new digital learning providers and public administration, not only in the Member States of the European Union.

As part of the preparation activities for Intellectual Outcome 02 within the DEE-Geays project, each partner in their own country conducted research - brief national contextual reports on existing e-learning initiatives.

To unify this survey, the following questionnaire has been prepared:

- What are the current trends in the development of educational e-learning platforms in your country? Especially, in NFE?
- What are good practices on the use of virtual tools in your country (including examples)?
- What are the problems and solutions proposed in the field of determinants of e-learning development in your country?

- What are the favorite remote teaching/learning apps in your country? Why?
- Does the development of social media affect NFE e-learning/digitization processes?
- How the current state of the COVID-19 Pandemic affects e-learning outcomes?
- Did COVID-19 Pandemic influence the change of legislation in the field of e-learning in your country? How?

In the project are included seven partners organizations from six countries: Association for European Cooperation Development and Communication from Belgium; "Danish Youth Team" from Denmark; Associazione Inco Interculturalita & Comunicazione and Associazione InCo (main project coordinator) – Molfetta from Italy; Association for research, education and development "Marketing Gate" from North Macedonia (responsible for preparation of this IO2 task); "Obcianske Zdruzenie Keric" from Slovak Republic and Fundacion XUL from Spain.

The following analysis is based on their research.

2.1.1 Belgium: Efforts to maintain learning continuity

Development of e-learning platforms, OER, MOOCs as intellectual outputs are very frequent now in the project proposals of Erasmus+ of Belgium applicants in 2020-2021. Though there are all project based. Main Belgium State Youth organizations currently do not have e-learning platforms to be used for their target groups.

The lockdowns in response to COVID-19 have interrupted conventional schooling with nationwide school closures, the majority lasting at least 10 weeks. While the educational community has made concerted efforts to maintain learning

continuity during this period, children and students have had to rely more on their own resources to continue learning remotely through the Internet. Teachers also had to adapt to new pedagogical concepts and modes of delivery of teaching, for which they may not have been trained. In particular, learners in the most marginalised groups, who don't have access to digital learning resources or lack the resilience and engagement to learn on their own, are at risk of falling behind.

The COVID-19 pandemic has also had a severe impact on higher education as universities closed their premises and Belgium shut their borders in response to lockdown measures. Although higher education institutions were quick to replace face-to-face lectures with online learning, these closures affected learning and examinations as well as the safety and legal status of international students in Belgium. Perhaps most importantly, the crisis raises questions about the value offered by a university education which includes networking and social opportunities as well as educational content. To remain relevant, universities will need to reinvent their learning environments so that digitalisation expands and complements student-teacher and other relationships. Students from privileged backgrounds, supported by their parents and eager and able to learn, could find their way past closed school doors to alternative learning opportunities. Those from disadvantaged backgrounds often remained shut out when their schools shut down.

2.1.2 Denmark: Rethink education and switching to e-learning methods

The Ministry of Foreign Affairs of Denmark has developed a number of e-learning courses that are also of interest to external partners and available free of charge. Some of the topics of the courses include gender equality, public financial management, development cooperation, human rights and green growth.

Speaking of NFE, the Danish strategy for lifelong learning developed by the Ministry of Education in Denmark back in 2007 validates non-formal and informal

learning, making it a priority on the policy agenda in Denmark for more than a decade.

NFE in Denmark includes competences acquired in the third sector, for example, at folk high schools (non-formal adult education), from participation in different activities in the business world, or actively volunteering in relief organizations, networks, etc. In conclusion, the concept encompasses formal learning, non-formal learning, and informal learning.

Nevertheless, validation has been developed with a top-down approach focusing on legislation. At the same time, a bottom-up approach has been developed for implementing validation activities in educational institutions. The legislation and formal framework have been set nationally, but the implementation is decentralized at the provider level. Validation of non-formal and informal learning has been an important focal point for many years in the non-formal sector, especially among organizations and institutions engaged in liberal education (third sector).

One of the main problems related to e-learning development in Denmark used to be internet access to the general population, as well as internet speed.

In order to address this problem, The Ministry of Climate, Energy and Utilities agreed with the central government, regions and municipalities to accelerate the adoption of digital solutions in the public and private sector. The strategy aims at upgrading the existing digital infrastructure in order to reach speeds of 100 Mbps download and 30 Mbps upload for all households and businesses by the end of 2021. In addition, the Danish Energy Agency has published a "5G Action Plan" for Denmark focusing on four main topics as the main cornerstones for a successful roll-out and utilization of 5G: frequencies, roll-out, regulation and use cases.

According to the Statista Research Department, as of 2020, 95 percent of Danish households had internet access. This percentage did not increase from the previous year, when the internet penetration rate among households also amounted to 95 percent. The highest share of Danish households with internet access in the period from 2007 to 2020 was in 2017, at 97 percent. How often was the internet used in Denmark? 95 percent of people reported to have been online once a week as of 2019. There were only two percent of the respondents who had used the internet less often than once a week that year.

Daily internet usage in Denmark was most common among 16 to 24-year-olds in 2020. 93 percent of people in that age group were using the Internet daily, whereas the corresponding figure for 25- to 34-year-old respondents was slightly lower, amounting to 89 percent.

The current school reality is forcing us to rethink education and to move towards the revival of learning settings. Today we have endless tools and instruments for learning that are more advanced than ever, but we fail to engage our students in making their better version of themselves. Even though going to school nowadays is mandatory and easy-accessible at least in all European countries (except some remote villages or communities), children seem not to enjoy it and most of them develop an attitude of disengagement. Although the lack of interest in formal instruction is supported by national educational reports and studies, non-formal education is growing and expanding as a "more powerful tool" of changing learning culture. This development, in accordance with the expanded use of Open Educational Resources (OERs), is creating a new perspective on expanding the dyad teacher -learner to facilitator – learner – content with different opportunities in wiring networks.

We identified four non-formal learning contexts: community development; adult literacy; workplace learning; and personal interest learning, and his study is suggesting that learner outcomes in formal education could also benefit from

the inclusion of this critical dimension. Therefore, it is important for the formal education to accept the existence of the informal and non-formal education, to embrace it and to use it in everyday teaching with the goal to ensure a socially active insertion of learners. To achieve the correlation of the formal, non-formal and informal education efficiently, first of all a clear perspective of these is requested. Therefore, we want, in the present study, reconsideration and re-meaning of the non-formal education concept, that which, all over the years, has been approached in different ways.

At the root of NFE is a participatory, grassroots approach to helping people to clarify and address their own needs. Far from being 'supplementary education' or 'extracurricular activities', NFE has developed into a worldwide educational industry.

However, it has yet to be studied as an independent educational approach. Aimed at all ages and literacy levels, NFE challenges traditional concepts of education. It affects society as a whole and the life and conduct of individuals, and has influenced formal education, which has adopted many of its theoretical assumptions and pedagogical practices.

Given the current COVID-19 pandemic, most of the educational institutions in Denmark had to switch to e-learning methods.

One major observation is that generally the attitudes to e-learning is positive: Denmark has political goals about access to machines, infrastructure, and internet at every school. There is dedicated substantial funding for schools buying e-learning material, and local successful e-learning companies such as Area9, EduLab, and Clio Online with international footprint and covering 90% of all schools in Denmark.

However, despite the many positive factors, which contribute to accelerating the use of e-learning, we also found others, which slow down the transformation:

Lack of evidence of the benefits from e-learning tools, doubt about whether it is possible to gather evidence in learning, and higher demands for evidence for e-learning tools than for other educational tools. There is also a missing trust and missing communication among stakeholders. We also observed a lack of vision on how digitalization can go beyond "PDFing" a book, and, finally, we met a fear that using Big Data for personalization of the teaching/learning process will be used to stereotype education or will only be used to save costs.

2.1.3 Italy: Aims at developing the highest-quality educational practices, boosting the integration of formal and informal learning

Italy has been testing innovative methods for learning as proposed by Schoolnet: E-twinning, Creative Classroom Lab, Living Schools Lab, Itec, Sennet e Scientix. Starting from these experiences, INDIRE (Istituto Nazionale di Documentazione, Innovazione e Ricerca Educativa - National Institute of Documentation, Innovation and Educational Research) lead the creation of an Italian network of learning vanguards (Avanguardie Educative: <http://innovazione.indire.it/avanguardieeducative/>) aiming at codifying and organising the heritage of didactic and methodological innovation developed by adhering schools. In addition to this, besides "institutional" channels, there has been a development of hubs and networks (both formal and informal) made up of associations, foundations and schools sharing practices (both online and offline) which contribute to the "digital movement" in Italy.

The current national plan for learning digitalisation (Piano Nazionale Scuola Digitale) aims at developing the highest-quality educational practices, boosting the integration of formal and informal learning. To do so, special focus is being given to the Open Educational Resources (OER) and, as far as educational platforms are concerned, efforts are being made to develop the LMS (Learning Management System) and the LCMS (Learning Content Management System). Moreover, social networks offer tools to interact with other individual users or to form peer groups to share contents and knowledge and thoughts; and the

editorial platforms offer the chance to integrate the original editorial materials with those created during learning activities or found on the internet.

According to research, Italy is lagging with respect to the development of e-learning. In fact, when looking at digital infrastructures, Italy was attested as 22nd among 30 countries examined, below average. One of the main criticalities is the e-learning accessibility from a computer at home: 27.5% of students do not have it. A major problem in Italy is the broadband and mobile download speed, which is on average 60.0 Mbit/s (in France, Hungary, Sweden and Spain the figure is doubled). Another major problem is the high percentage of teachers being over 50 years old (36%), who lack digital knowledge and are therefore in need of ICT training.

Possible solutions are forecasted by the investments made for the "Piano Nazionale Scuola Digitale", developed by the MIUR (Ministero dell'istruzione, dell'università e della ricerca) to create a new vision of learning in a digital era, supporting the life-long learning in all life-wide contexts (formal and informal). This plan is also aiming at tackling the main obstacles to e-learning development in Italy, as previously highlighted, working on accessibility and digital literacy.

The MIUR also advocates for the creation of innovative local labs - at the disposal of any school - where it is possible to develop advanced educational practices also for youngsters without jobs and NEETs, as well as the creation of "school-friendly" labs - accessible to schools - in local museums, research centers, associations, etc.

The National Plan for School Digitalisation in 2015, which is now being crash-tested in the face of Covid-19. Schools where technology was already part and parcel of teaching – mostly at the upper secondary level – were obviously better prepared when school closures happened. The development of distance teaching practices, however, is much less straightforward for younger students.

Initiative for school's span from mentions of schools' experiences; lists of e-learning platforms (e.g., Google Suite, Facebook, Weschool, etc); resources supporting students with disabilities (Progetto Tris, Dida Labs Prezi, Institute for learning Technologies ITD, etc.), multimedia content (Rai Scuola, Rai Cultura, Treccani scuola, Fondazione Reggio, etc.); and webinars. The National Institute for Documentation and Innovation in Educational Research (INDIRE) with other two networks developed Flipped classroom, a project adopted by 592 schools, through which lessons with associated homework are provided via videos and other digital resources. Peer learning and collaboration have become vital: some teachers are mentoring colleagues via webinars and on Facebook.

Many factors affect who can benefit from distance learning: family's situation, accessibility, affordability, remoteness, internet connection speed, etc. All these initiatives, however, show that the education community, even in such a difficult and unpredictable moment, wants to find solutions.

2.1.4 North Macedonia: One year of Eduino web portal for digital education

The COVID-19 pandemic is expected to have a significant short-term and mid-term influence on the behaviour of the society and in that way on the non-formal education in North Macedonia. As it started abruptly, there was no sufficient time for a proper adjustment to the new situation. The obligations for compulsory health and safety measures additionally worsens the context of non-formal education and the crises spilled on the surface are in fact the drawbacks that were neglected before. Challenges cannot be overcome by quick fixes and improvisation as in normal times. Because there was a lot of restriction according to the state of emergency for the entire territory of the country, non-formal education was interrupted.

The pandemic disrupted organizing education in all levels. All opportunities for learning skills through hands-on experience (either at the school premises or through practical training) were made impossible due to the restrictions.

March 17, 2021, was marked one year of Eduino web portal for digital education, coordination and professional development launched in March 2020 to provide digital education resources and keep children learning during COVID-19 pandemic.

Following the closure of schools for most students in North Macedonia, Eduino offered a wealth of resources it has crowd-sourced from educators across the country including digital content for teachers and students, education tools and over 400 games for parents to stimulate their child development at home.

According to over 16,000 respondents, school principals, teachers, parents, and students, the Eduino portal has been widely used and provided digital education resources to more than half of the entire teaching force.

When comparing the research findings from the first phase covering 2019/2020 school year with the findings from 2020/2021 school year it is evident that both teachers and students are better adjusted in using digital tools for distance learning and communication. However, the shift to virtual learning introduced new difficulties and challenges for schools, students, and teachers.

Even before COVID-19, a learning crisis persisted in the country and school closures have exacerbated the problem. The most vulnerable children are falling far behind their peers, and many are at risk of dropping out altogether. Research shows that the digital divide is perpetuating inequalities and education for those with no internet access is out of reach.

The current country education reform proposes solutions and promotes increased school stay/hours, more school autonomy, higher level learning and more elective courses and extracurricular activities.

These intended outcomes stem from the OECD review findings and can support improved learning outcomes for all children and create differentiated learning paths based on their interests and competencies.

The low level or inefficient investments in education in the past, supplemented with weak schooling infrastructure, improper alignment of the non-formal education and the labour market needs and insufficient digitalization in the education in general are among the challenges which require innovative measures in this difficult time.

Non-formal education is challenged to better align with labour market and society needs. An improved coordination of the non-formal education supporting measures provided by the different ministries will stimulate and steer non-formal offers towards qualifications of high national priority.

2.1.5 Slovak Republic: Long-term goal to push for digitalization and blended learning

Slovak formal education is having a long-term goal to push for digitalization and blended learning. That was more coming from the Government but never reached the realities of primary and secondary schools. When the first lockdown started in March 2020, schools were really struggling, and a huge number of students and teachers did not have access to Wi-Fi or tools to take part in online teaching. Most of the educators focused on sending PDF slides and only a minority try to lead classes via video calls. In the second wave teachers and schools were more prepared. The schools set up distance learning schedules, bought Microsoft teams for online classes and students from difficult social backgrounds received tablets and notebooks. The training and exploring new tools were left to teachers alone and they had to educate themselves.

In NFE the change happened much more organically, and most of the organizations were able to change at least part of their activities to online work.

Many of them proposed corporations to schools- train teachers, help in classes or provide extracurricular activities online.

National Agency Juventa was a huge support for finding online tools suitable for NFE and leading trainings on weekly basis.

Non-formal education in Spain is outdated. There are platforms but really in Spain the most used are Moodle. In Spain we do not generate trends in digital tools, we see what we have and based on the tools we have we work with them in the field of non-formal education. We do not design e-learning platforms or digital tools because we do not have people specialised in this field.

The problems are mostly that the national reform does not reach the realities of the schools. Many of them need more training, financial support for buying tools for teachers and laptops for students. Many teachers are still lacking any IT skills allowing them to take advantage of online teaching.

Another issue is ongoing changes in Covid lockdown from day to day which does not allow schools to come up with any long-term plans.

The solution for Covid lockdown situation oversaw ministers and new more transparent and long-term plans.

The situation about educating teachers and financially supporting schools and students is still in progress.

The development of social media positively affected NFE e-learning/digitization processes. Definitely. It is easier to promote our activities, reach a wider audience and get stronger feedback from the community.

The current state of the COVID-19 Pandemic affects e-learning outcomes acted as a pushing power for NGOs to digitize themselves, get more flexible and provide activities in digital space as well as use more online tools in person. The

pandemic situation fastened the process of digitization and showed its importance and convenience.

One of the priorities of Slovak government and EU is being greener and digitizing education. Many activities and programmes will stay in online space even after the situation goes back to normal.

2.1.6 Spain: More committed to new form of learning

Non-formal education is outdated. There are platforms but really in Spain the most used are Moodle. In Spain we do not generate trends in digital tools, we see what we have and based on the tools we have we work with them in the field of non-formal education. We do not design e-learning platforms or digital tools because we do not have people specialised in this field.

The problems we have seen are that schools are not adapted to digital education. So even if NGOs bring educational programmes or online training to these centres, they do not have the digital capacity to carry them out. In other words, there is no equipment coverage from the educational centres and neither from the Spanish social organisations.

In addition, the Spanish government should also allocate more funds for network coverage, as this is also a problem.

It is also important to highlight training, since Spanish society has a very basic use of new technologies, such as a computer, and this also creates some problems when it comes to implementing the e-learning model, since not everyone is digitally literate.

The vast majority of young people in Spain, and worldwide, make daily use of social media, such as social networks, thanks to which young people can stay in contact with their friends, family, teachers, etc.

In applications such as Twitch, Telegram, WhatsApp, young people create groups to be able to start conversations with their friends. In addition, among others, a large number of academic profiles have been created on networks such as Instagram. These types of initiatives create spaces for debate, where young people can exchange their ideas, opinions and knowledge.

The favorite remote teaching/learning apps in Spain are:

- Genially allows you to use gamification and quizzes to dynamise online. As for group feedback, you can chat about the applications used or establish the possibility of asking for a turn to speak.
- Groupmap. Very good for brainstorming, collective development of ideas, etc. And for generating debate.
- Direct Poll: This tool has also generated a lot of debate and participation.
- Kahoot: It works very well, it is dynamic and motivates the students and they already know it.
- Google Meet: Simple and accessible to all centres. Free of charge.
- Google forms: Convenient for instant results and answers and data systematization

Given the new situation we have been living in for a year now, young people have become more committed to this new form of learning, thus reinforcing their engagement with social media. Moreover, these media facilitate collaborative learning.

This opens up a range of collaborative learning opportunities for young people, allowing them to learn while they play, developing their creativity.

The pandemic has favoured e-learning, as the vast majority of activities have had to be carried out online. Moreover, we have to bear in mind that the pandemic caught us all unawares and forced us to adapt to this new modality. It is true that at first Spanish society was not happy with this change, since they

had to adapt to a new modality that was unknown to them. Now, after a year working online, doing courses, activities, classes different online activities, we have got used to this new reality, obtaining knowledge in the new e-learning methodologies.

2.1.7 Overnight transition to remote learning

The COVID-19 pandemic has caused an unprecedented disruption of education systems globally, affecting the lives of more than 1.5 billion students and their families. Immediate policy responses were aimed at ensuring continued curriculum-based learning through a range of remote learning modalities including online TV/radio, paper-based take-home materials, or other approaches.

Governments reacted to the challenges of this overnight transition to remote learning by trying to strengthen support to teachers and by adjusting their assessment and examination policies. Specific measures were also put in place to ensure the inclusion of populations at risk of being excluded from distance learning platforms, as well as to support student wellbeing. (UNESCO, UNICEF and The World Bank, 2020, p. 11).

During the first wave of COVID-19 in spring 2020, many governments in the EU took the decision to close schools and provide full-time remote schooling in order to reduce the spread of the virus. In the European Economic Area, up to 90% of countries closed their schools during the springtime depending on the week (European Centre for Disease Prevention and Control, 2020).

With time, most EU governments decided to implement measures to allow schools for distance education with the support of digital technology, and other media such as TV and radio or paper-based approaches.

To make remote learning successful, more needs to be invested in the digital, pedagogical, social, and emotional competences required (see Figure 1).

AREA	INSIGHTS
Inequality in schooling	<ul style="list-style-type: none"> ● Remote learning may aggravate inequalities in a multidimensional way. ● Digital equipment remains a cause of inequalities in remote schooling. ● Parents' and carers' support for students in the early years of education is crucial. ● Parents need guidance on how to support their children' learning. ● Uneven levels of parents' digital competence widen inequalities. ● Remote learning was more burdensome for families with children with special educational needs and disabilities. ● Children with language barriers need targeted assistance when learning remotely.
Teaching, learning content and tools	<ul style="list-style-type: none"> ● Remote education may complement in-person teaching. ● Synchronous digital learning sessions in smaller groups worked better than in larger groups. ● Remote teaching goes beyond making learning content digital. ● Teachers benefited from sharing good practices in the transition to remote education. ● Abundance of digital learning environments may trigger confusion and frustration among users. ● Remote schooling has an ambiguous impact on students' performance.
Competences	<ul style="list-style-type: none"> ● Remote teaching requires an appropriate range and level of digital competence. ● Teachers' competence in digital pedagogy for remote education needs further development. ● IT assistance for schools during remote learning is indispensable. ● Online privacy and safety are important topics, but they receive insufficient attention. ● Digital competence of primary level students is still too low to participate in remote learning without parental support. ● Students need both digital and social and emotional competences to take advantage of remote education. ● Students' self-regulation competence can help them to be more successful in remote schooling. ● Developing students' social skills is more challenging during remote schooling.
Certification and assessment	<ul style="list-style-type: none"> ● Monitoring students' performance in remote schooling is challenging. ● Delayed feedback affects students' learning experiences. ● The use of self and peer-assessment was underutilised.

	<ul style="list-style-type: none"> ● Evaluation is a complex task for teachers and school systems.
Mental health	<ul style="list-style-type: none"> ● Training in keeping good mental health helps teachers to deal with remote schooling. ● Peer support plays a role in mitigating teachers' stress. ● Addressing the diversity of mental health needs of vulnerable students and their families requires an individual approach. ● Monitoring students' well-being is more difficult during remote schooling.

Source: (Joint Research Centre, 2021, p. 20)

A published-on schooling practices during the coronavirus pandemic shows that full-time remote education can deepen existing inequalities and often does not allow for a proper monitoring of student performance and well-being. (Joint Research Centre, 2021).

2.1.8 Social media affect NFE e-learning/digitization processes

The leading social networks are usually available in multiple languages and enable users to connect with friends or people across geographical, political, or economic borders. Social networking sites are now estimated at 278.414 to have 3,6 billion users and these figures are still expected to grow as mobile device usage and mobile social networks increasingly gain traction in previously underserved markets.

Social media can represent an asset to contribute to the learning digitalisation process and improve e-learning. Social media platforms offer features and functionality that can be leveraged to supplement and complement the use of a traditional LMS:

- They are widely available to anyone with an internet connection.
- They are "open", which makes them more broadly accessible.
- They are "social" by definition, unlike LMSs that are more hierarchical and "close-looped".

- Like many front-line LMS tools, social media platforms support multi-media. However, unlike LMS, the "reach" of social media goes beyond the curated content available on formal teaching networks.
- While many proprietary (conventional) LMS networks are locked behind firewalls and other barriers, most social media networks are easily accessible. Learners, therefore, more readily gravitate towards these types of communities.

The real power of social media is in facilitating group learning. Studies show that adult learners are more adept at learning from their peers and fellow learners than they are from lecturers and teachers. Therefore, group activities can be created setting up the appropriate networks (e.g., Facebook Networks or Chat Rooms/Space on MySpace, or other Groups and Feeds) where designated groups can come together.

While the analysis indicates that there is a potential for utilizing digital tools towards social inclusion, it is important to reiterate that the existing tools and platforms are not necessarily developed with the purpose of social inclusion of young people, and very few initiatives target youth with multiple disadvantages. In order to take advantage of the new technologies and explore digital solutions towards fostering social inclusion: (Şerban, Stefan, Potocnik, & Moxon, 2020, p. 55)

- European, national and local authorities should devise and adopt policies and strategies that support access/connectivity and Internet safety and facilitate use of digital opportunities for social inclusion.
- Youth workers and educators should take advantage of and actively seek opportunities for developing their digital skills and competences.
- Youth workers and educators should explore opportunities for social inclusion of marginalised young people through digital youth work.

- Young people should be involved as partners and co-creators in development of new platforms, tools, and approaches for social inclusion through digital means.
- Strategies should be developed at all levels and by a variety of stakeholders to mitigate potential risks of digitalisation for young people, particularly those already at risk of exclusion. Cross-sectorial cooperation should be emphasised between governments, transnational and local authorities, and civil society organisations, youth sector, ICT companies, private sector, and young people.

The development of digital tools and platforms, and their proliferation in youth work carry numerous opportunities and risks associated with use of digitalization towards social inclusion. Youth work can reach more young people, identify their needs and priorities better, offer personalized information and guidance, support education systems and digital media, tools, apps, and methods can be incorporated into any type of youth work. On the other hand, young people benefit from new technologies in various areas, including health, mental health and wellbeing, communication and information, participation and decision-making, creativity, and self-expression. Nonetheless, the youth sector should also be aware of the risks of digital work for young people, such as cyber-bullying, issues of privacy and data protection, existence of harmful online content and information bubbles and need for development of critical thinking and critical analysis of the information available online.

2.1.9 Learning online: A challenge to achieve better learning outcomes

Education is a complex system that is influenced by various social, cultural, and economic factors and must integrate concepts, positions and interests of different actors. To elucidate the current and future challenges of education in the digital world from multiple perspectives, the literature review will be structured

along the four most relevant stakeholders of education in the digital age: (Braun, März, & Fabian Mertens, 2020, p. 3):

- Policymakers and public administration are responsible for providing and encouraging policy frameworks especially in terms of infrastructure and investment in research and skills.
- Students are considered 'digital natives' growing up in a digitalised world. However, even though this generation uses digital devices daily, only a small part can be considered digitally fluent.
- educators and trainers have a crucial role in implementing digital technologies into school life.
- businesses and employers are closely intertwined with the educational system as they require certain skills and competences taught in school, vocational training or university. it would be beneficial to strengthen the interrelation and cooperation between entrepreneurs, education, and science to increase mutual understanding and to avoid mismatches.

Figure 2 SWOT as basis for policy options

	Policy-makers	Students	Educators and trainers	Employers and employees
Strengths	Provision of digital infrastructure for school has reached a good level when looking at European averages Policy work increasingly focuses on the 'soft factors' such as quality of learning, teacher training and student competence building.	Strong affinity and experience in using digital technologies. Digital skills differ only negligibly between genders among the young generation.	New methods of professional development are promoted by initiatives such as eTwinning.	Flexibility of work and lifelong learning. Various tools for identifying future skill requirements.
Weaknesses	Disparities between regions and countries persist in terms of the	Digital skills depend on educational background, age, gender (in older	No systematic professional development programmes on	Youth unemployment and

	provision of digital infrastructure for schools	generations) and country. Disparities in the beneficial and critical usage of digital technologies depending on socio-economic background. Girls are far less likely to turn their digital skills into a career.	education in the digital age for teachers, often only on a voluntary basis. Programmes are often not regularly evaluated and not necessarily built upon scientific evidence.	over-qualification at the same time. Skill mismatch regarding ICT. Non-formal and informal skills are often not sufficiently recognised and formally approved.
Opportunities	Providing platform and cloud solutions, open educational resources and massive open online courses would offer opportunities as affordable and versatile instruments for re- and upskilling.	Capitalise on the existing digital skills of girls. Strengthening career guidance, computational thinking and entrepreneurship education would bring significant economic and social benefits.	Personalised learning contexts could improve student motivation and retention and shift the teacher role from instructor to 'learning guide'. Teachers' resources could be freed up for pedagogically more valuable tasks.	Creation of new occupations. Lifelong learning with digital applications.
Threat	If up-to-date technological infrastructure is not broadly available in educational contexts, students cannot be sufficiently prepared for the challenges of tomorrow's labour market. A lack of interoperability and standards compliant with European non-discrimination and data protection laws	If disadvantaged students do not receive sufficient support, the 'second digital divide' will widen, youth unemployment will rise and a part of the young generation will be left behind.	Insufficiently trained teachers cannot prepare students for the challenges of tomorrow's jobs. Issues concerning data protection and discrimination by algorithms could arise from new teaching software.	Possible job substitution and job polarisation. If the current and future workforce is not adequately trained and educated, Europe will lose its global competitiveness.

Source: (Braun, März, & Fabian Mertens, 2020, p. 38)

Resulting from the analysis (see Figure 2), are recommend four major policy options: (Braun, März, & Fabian Mertens, 2020, p. 2):

- Incorporate education in the digital age more strongly into existing and future research frameworks to further promote evidence-based policy.

- Support the creation of a knowledge-sharing platform for education in the digital age to improve the dissemination and adoption of success models across Europe.
- Simplify and harmonise the recognition and validation of lifelong learning to increase both value and quality of non-formal education, accelerate reskilling and upskilling, and better match workers' skills with the labour market's necessities.

Offer a harmonised, yet versatile cloud solution for the provision of (open) educational resources that can be adjusted to varying contexts (e.g., different countries, educational systems).

While the analysis indicates that there is a potential for utilising digital tools towards social inclusion, it is important to reiterate that the existing tools and platforms are not necessarily developed with the purpose of social inclusion of young people, and very few initiatives target youth with multiple disadvantages. In order to take advantage of the new technologies and explore digital solutions towards fostering social inclusion: (Şerban, Stefan, Potocnik, & Moxon, 2020, p. 55):

- European, national, and local authorities should devise and adopt policies and strategies that support access/connectivity and Internet safety and facilitate use of digital opportunities for social inclusion.
- Youth workers and educators should take advantage of and actively seek opportunities for developing their digital skills and competences.
- Youth workers and educators should explore opportunities for social inclusion of marginalised young people through digital youth work.
- Young people should be involved as partners and co-creators in the development of new platforms, tools, and approaches for social inclusion through digital means.

- Strategies should be developed at all levels and by a variety of stakeholders to mitigate potential risks of digitalisation for young people, particularly those already at risk of exclusion. Cross-sectorial cooperation should be emphasised between governments, transnational and local authorities, and civil society organisations, youth sector, ICT companies, private sector, and young people.

At the European level, both the European Union and the Council of Europe have developed various instruments to address this topic. European Union has over the past decade adopted Digital Agenda for Europe (2010), Digital Single Market for Europe (2015) and a Europe fit for the digital age (2020), in order to address the need for promoting development of digital competences among the citizens, which has also been reflected in the EU Youth Strategy 2019-2027.

Erasmus + and European Solidarity Corps programme priorities also reflect the focus on promoting digital skills, while also enhancing engagement, social inclusion, and solidarity. Council of Europe's work in this field has focused both, on promoting the social rights of children and young people, while at the same time calling for the protection of rights within the digital environment and Internet safety (Şerban, Stefan, Potocnik, & Moxon, 2020, p. 55)

At the national and local levels, the policies and initiatives addressing digitalisation and social inclusion range from countries which have clear and well-defined national policies or practical initiatives addressing digitalisation and young people's skills (Albania, Austria), countries in which digitalisation remains the area of formal education (Germany, Croatia), countries where National Youth Strategies refer to digitalisation and social inclusion of young people (Greece, Estonia, Malta, Ireland, Serbia) and even local authorities whose policies have clearly focused on development of digital skills of citizens (Estonia).

3. VIRTUAL LEARNING MOBILITIES AND EUROPEAN PROJECTS IMPLEMENTED ON THE THEMATIC OF DIGITIZATION

Digitalization has spontaneously made its way into youth work. Its presence and use in the youth sector have grown significantly over the last few years. Now accepted as part of the practice, it is often assumed that digital tools offer a panacea for reaching out to include more young people, especially those hard to reach due to different social, geographical, economic, or cultural barriers. Yet, social inclusion as it relates to the digital world is about more than just access to technology and can be considered a complex, multidimensional concept.

Technological change requires young people to quickly build the skills and competences needed for the digital era. Yet, “being digitally competent is more than being able to use the latest smartphone or computer software — it is about being able to use such digital technologies in a critical, collaborative and creative way” (European Commission, 2017)

3.1. [A learning revolution is here](#)

In 2021, workplaces are all about swift skill building at scale. Companies, public authorities, NGOs need skilled and knowledgeable employees/volunteers.

According to Josh Bersin in “Making Learning a Part of Everyday Work,” “80% of CEOs now believe the need for new skills is their biggest business challenge.” But are we delivering digital solutions that develop skills whilst maximizing performance today?

Trying to plug skill gaps with courses has always been flawed due to a lack of opportunity to apply knowledge in flow. The ever-increasing speed of knowledge change only increases this gap between knowledge acquisition and application, meaning it is even less fit for the purpose.

Table 1 Inability to access knowledge on the job



Source: Brandon Hall Group, Knowledge in the Flow of Work, London, 2021 p.3

While employers everywhere focus on skills development, 80% of that knowledge is almost immediately lost due to lack of practice and retention. Employees need access to knowledge in the flow of work. Without that access, time is wasted, and productivity is lost. (Brandon Hall Group, 2021a, p. 2)

Learners must have opportunities to practice and apply their new skills and knowledge. Ensuring these are built into learning programs will enable people to perform better in their roles. These opportunities can also be used as refreshers and reinforcement to sustain knowledge retention and improve performance. Learner feedback is also a key element of an effective learner environment. Likewise giving learners the opportunity and mechanisms to provide feedback themselves should also be an integral aspect of the learner experience.

Table 2 Design Programs with the Learner in Mind



Source: Brandon Hall Group, *Learner Engagement and Performance: From Correlation to Causation*
London, 2021 p.3

This feedback keeps learners engaged and involved in their own learning, while at the same time providing data and insight to help shape future programs and the overall strategy.

Companies that do all of this achieve better results than those that do not. In our research, we have been able to isolate those companies that say their learning efforts have had a positive impact on the following outcomes: (Brandon Hall Group, 2021, p. 11)

- Time to productivity/ effectiveness;
- Voluntary turnover/ employee retention rates.
- Employee engagement;
- Individual performance;
- Manager/supervisor observations;
- Team effectiveness.

TED Talks puts out 2,600 events per year — and it's growing. LinkedIn has over 5,000 courses available. Then there are relevant webinars and CEs plus internal courses on HR and management. These are great ways for youth workers / youth to add basic knowledge to their tacit knowledge and bring value to the NGOs but getting that quantity of knowledge into the flow of work is mind-bending.

At the same time, according to LinkedIn, top priorities for Learning and Development are:

Leadership and management learning (53%); Upskilling and reskilling (59%) and Virtual onboarding (33%).

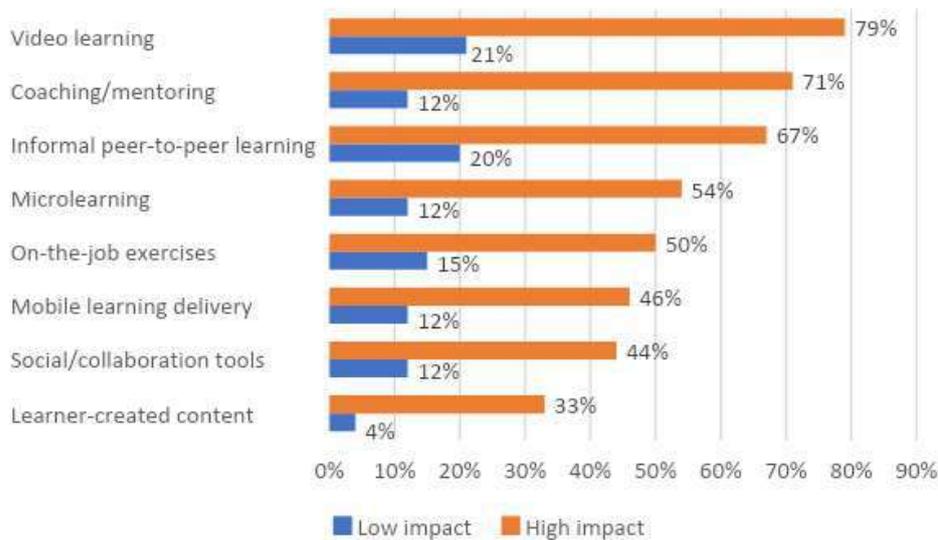
Respecting these facts, the crucial question is how can you meet these needs and still maintain productive, engaged youth workers?

3.2. Explore multiple tools and technologies

Relying solely on classes and courses will not ensure people have what they need to do their jobs. Learning is a continuous, ongoing process and people must connect with learning on a much more frequent basis than the traditional model allows.

We are in an era where people are accustomed to instant access to the information they need, and learning must be able to operate on that level.

Graphic 1 Learning Tools Used, Regularly or Consistently (in %)



Source: Brandon Hall Group, Learning Strategy Study

An effective learner experience includes multiple pathways and learning opportunities available to all employees, regardless of level or role. Some of the elements found among effective environments include: (Brandon Hall Group, 2021, p. 13)

- Hands-on, active, real-world, on-the-job instruction
- On-demand online courses, at your own pace
- Self-directed/informal from others or on your own
- Anytime/anywhere mobile-friendly learning
- Audio/video tutorials or demonstrations

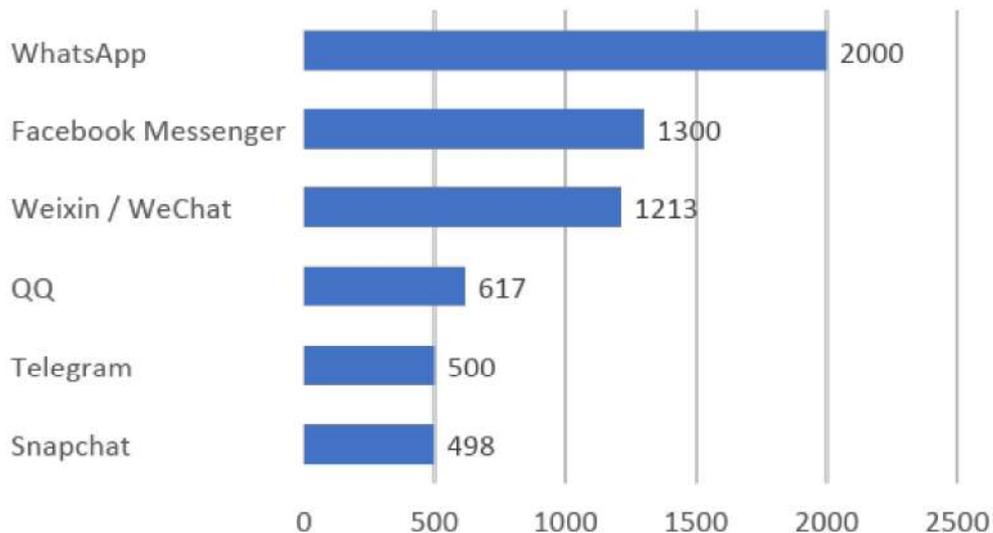
Looking again at the “High Impact” companies in Brandon Hall Group research, we see that these organizations are also much more likely to use a wider array of learning tools and technologies.

3.3. Digital Tools and Online platforms addressed to young people and youth workers

International platforms and tools have been embraced by the youth sector as valuable resources, integrated in various activities. Thus, Virtual Meeting Rooms (VMR) software: Zoom [<https://zoom.us/>]; Skype [<https://www.skype.com/>]; Google Meet [<https://meet.google.com/>]; Microsoft Teams [<https://www.microsoft.com/en-ww/microsoft-teams/group-chat-software>], ezTalks [<https://eztalks.com/>]; etc.

Messaging applications have become popular among youth organisations and youth workers, who use them as channels to better communicate, outreach and support more young people, organise their activities or provide educational opportunities to various groups.

Graphic 2 Most popular global mobile messenger apps as of January 2021, based on number of monthly active users (monthly active users in millions)



Source: <https://www.statista.com/statistics/258749/most-popular-global-mobile-messenger-apps/>, accessed 11/05/2021

As of January 2021, two billion users were accessing the WhatsApp messenger monthly. The app's usage penetration is particularly strong in markets outside of the United States and it is one of the most popular mobile social apps worldwide. In February 2014, social network Facebook acquired the mobile app for 19 billion U.S. dollars.

Instant messaging is a type of online chat which offers real-time text transmission via the internet. Since the appearance of smartphones and the subsequent explosion of mobile apps, low-cost or free chat and social messaging apps have proven themselves as a cheap alternative to operator-based text messaging via SMS. Many messenger apps offer features such as group chats, the exchange of graphics, video and even audio messages as well as stickers or emoticons.

Similarly, young people and specialists working with young people (youth workers, social workers, teachers, etc.) have access to various educational platforms that offer access to a multitude of opportunities.

A list, with some of the most popular, includes: (Şerban, Stefan, Potocnik, & Moxon, 2020, p. 28)

- edX [<https://www.edx.org>], founded by Harvard and MIT, 28 offering a wide diversity of free open online course provided by globally top-ranked universities and industry companies.
- Coursera [<https://www.coursera.org>] offers to both young people and youth professionals' various courses on welfare and rights of youth and social inclusion.
- Khan Academy [<https://www.khanacademy.org/>] offers tailored content adapted to age, including resources for teachers and parents.
- Scratch [<https://scratch.mit.edu>] enables creativity through programming, offering educational tools for both young people and teachers.
- Kahoot [<https://kahoot.it/>] stimulates learning through a game-based approach to learning, making it a valuable tool for both youth workers and teachers who can create their own content, for free.

3.4. EU: Resetting education and training for the digital age

The idea to create a European Education Area was first endorsed by European leaders at the 2017 Social Summit in Gothenburg, Sweden. The first packages of measures were adopted in 2018 and 2019.

The Digital Education Action Plan (2021-2027) outlines the European Commission's vision for high-quality, inclusive, and accessible digital education in Europe. It is a call to action for stronger cooperation at European level to:

- learn from the COVID-19 crisis, during which technology is being used at an unprecedented scale in education and training.
- make education and training systems fit for the digital age.

The COVID-19 crisis led to an unprecedented shift to online learning and digital technologies. Access to broadband internet varies significantly across the EU, ranging from 74% of households in the lowest-income quartile to 97% in the highest-income quartile. More than one in five young people fail to reach a basic

level of digital skills across the EU. Only 39% of teachers in the EU feel well prepared for using digital technologies in their daily work.

According to 2020 public consultation results: (European Commission, 2021a)

- almost 60% of the respondents had not used distance and online learning before the crisis.
- 95% consider that the COVID-19 crisis marks a point of no return for how technology is used in education and training.
- respondents say that online learning resources and content need to be more relevant, interactive, and easy to use; and
- over 60% felt that they had improved their digital skills during the crisis and more than 50% of respondents want to do more.

Particularly considering the COVID-19 pandemic, it is essential to prevent structural barriers to learning and skills development from impacting citizens' employment prospects and participation in society.

The European Education Area, therefore, ties in with Next Generation EU, the EU's COVID-19 recovery plan to lead the Union out of the crisis and towards a modern and more sustainable Europe fit to face the digital and green transitions. It aims to develop a holistic approach to EU action in education and training to create a genuine European digital space of learning, which benefits all learners, teachers, and institutions.

3.5. EU: Online learning resources

The outbreak of COVID-19 in Europe and necessary national measures taken to tackle the spread of the virus may cause significant disruption to the provision of education, training and mobility opportunities for learners, teachers, and educators across the European Union.

Online tools-like many digital tools (online and offline) – can serve different educational purposes: (European Commission, 2021b)

- connecting educators and learners with each other when in separate locations.
- accessing information and environments not usually available in every home or institution, and
- supporting continued professional development of educators in a flexible way

Inspired by the popularity of the international online platforms and the need to adjust to the new digital world, a series of European platforms and resources have emerged during the years.

To help ensure continuity in education and training activities, there is a wide range of online learning materials made available online (European Commission, 2021b):

- a. Online platforms for teachers and educators
- b. EU-funded projects

3.5.1. Online platforms and tools

1. **The Erasmus+ Project Results Platform** provides access to information and results concerning all projects funded under the Erasmus+ Programme and some of the projects funded under its predecessor programmes in the field of education, training, youth and sports [<https://ec.europa.eu/programmes/erasmusplus/projects/>]. Organisations can find their inspiration in the wealth of project information and make use of the results and lessons learned from 15 years of Erasmus+ implementation.

2. School Education Gateway

[www.schooleducationgateway.eu] is an online catalogue of teaching materials and training opportunities for teachers and stakeholders in European school education available in 23 European languages. School Education Gateway is still fully operational and ready to support online teaching and professional development. The basic resources are:

- Publications. Reports and studies regarding school education policies from both European and national levels. [<https://www.schooleducationgateway.eu/en/pub/resources/publications.htm>].
- Tutorials. Practical ideas and inspiration for teachers and schools. [<https://www.schooleducationgateway.eu/en/pub/resources/tutorials.htm>].
- Teaching materials. Versatile teaching materials created by the EU institutions and EU-funded projects. [https://www.schooleducationgateway.eu/en/pub/teacher_academy/teaching_materials.htm]

3. eTwinning is the community for schools in Europe

[<https://www.etwinning.net>] eTwinning is a collaborative European platform for teachers to communicate, exchange resources, undertake professional development opportunities and co-create projects available in 30 languages. eTwinning offers a platform for staff (teachers, head teachers, librarians, etc.), working in a school in one of the European countries involved, to communicate, collaborate, develop projects, share and, in short, feel and be part of the most exciting learning community in Europe. eTwinning is co-funded by the Erasmus+, the European programme for Education, Training, Youth and Sport.

- eTwinning Project Kits. Project Kits can be used as benchmarks for teachers who wish to implement similar projects, or as tools for inspiration or fresh ideas. [<https://www.etwinning.net/en/pub/get-inspired/kits.cfm>]

4. Learning Corner

[<https://europa.eu/learning-corner>] If you're a primary or secondary school pupil, this is where you'll find games, competitions and activity books to help you discover the EU in a fun way, in the classroom or at home. You can also find out more about studying or volunteering abroad.

If you're a teacher and want to help your pupils learn about the EU and how it works, this is a source of teaching material for all age groups. As well as finding inspiration for lesson plans, you can also discover networking opportunities with other schools and teachers across the EU.

5. SELFIE - "Self-reflection on Effective Learning by Fostering the use of Innovative Educational technologies"

[https://ec.europa.eu/education/schools-godigital_en] is a free, multilingual, web-based, self-reflection tool to help general and vocational schools develop their digital capacity. SELFIE for Schools anonymously gathers the views of students, teachers and school leaders on how technology is used in their school. This is done using short statements and questions and a simple 1-5 answer scale. Based on this input, the tool generates a report – a snapshot ('SELFIE') of a school's strengths and weaknesses in their use of technology. SELFIE is available for any primary, secondary and vocational schools in Europe and beyond, and in over 30 languages. It can be used by any school – not just those with advanced levels of infrastructure, equipment and technology use. SELFIE has been developed by the Joint Research Centre and Directorate General for Education, Youth, Sport and Culture (DG EAC).

6. Electronic Platform for Adult Learning in Europe

[<https://epale.ec.europa.eu>]. EPAL is a European, multilingual, open membership community of adult learning professionals, including adult educators and trainers, guidance and support staff, researchers and academics, and policymakers. EPAL is funded by the Erasmus+ programme. It is part of the European Union's strategy to promote more and better learning opportunities for all adults. On a day-to-day basis, EPAL is managed by a Central Support Team with the help of 37 National Support Teams across Europe.

7. European Youth Portal

[https://europa.eu/youth/home_en] is an inter institutional platform of the EU which offers information on the various opportunities and resources available to young people, covering 35 countries and available in 28 languages. As the biggest platform of youth organisations in Europe, it has played a significant role in continuing to support youth organisations, reacting quickly to provide information and resources. EYF established spaces for its member organisations to share best practices and promote important initiatives. Under the unifying banner of #SeparatedbutUnited, they used the common platform to share examples of how their member organisations and partners were leading the way in providing critical information, promoting important messages, and supporting their communities. The forum also provided tools, resources, information, and subscriptions to help youth workers operate online and developed an **online events toolkit**.

8. The HEInnovate

[<https://heinnovate.eu/en>] guiding framework offers Higher Education Institutions (HEIs) in the EU and beyond the opportunity to examine their innovation and entrepreneurship capacities through self-reflection in one or several of eight dimensions. Training materials are available on the website. Erasmus-funded projects such as the European University Alliances and the Alliances for Innovation are invited to use HE Innovate where relevant to accompany their projects.

9. European Institute of Innovation and Technology (EIT)

Access resources supporting the provision of quality online teaching and learning by higher education professionals produced by the European Institute of Innovation and Technology (EIT) through:

- a. Teaching online in times of crisis

[https://beyondmoocs.ise.innoenergy.com/external_content/teaching-online-times-crisis]

- b. EIT Digital: online courses [<https://www.coursera.org/eitdigital>]

c. EIT InnoEnergy: online courses [<https://sea.innoenergy.com/learn>]

10. EU Code Week

[<https://codeweek.eu/resources/>]. EU Code Week is a grassroots initiative, supported by the European Commission. It aims to bring coding, programming, computational thinking, and digital literacy to everybody in a fun and engaging way (available in 29 languages). Anyone is welcome to organise or join an activity. Just pick a topic and a target audience and add your activity to the map or browse for activities in your area.

11. Youth policy essentials

[<https://pjp-eu.coe.int/en/web/youth-partnership/online-course-on-youth-policy>] is the first Massive Online Open Course (MOOC) on youth policies, created by the EU Council of Europe youth partnership. The course is particularly addressed to youth policy makers, youth NGOs, youth leaders, youth workers and researchers.

12. Youth Work Portfolio

[<https://www.coe.int/en/web/youth-portfolio/online-portfolio>] is a tool designed for youth workers, youth leaders, volunteers or professionals working in the youth sector with an aim to support their self-assessment regarding the level of youth work competence, as well as to further set new learning and professional development goals. This is the online version of the tool developed by the Council of Europe and originally published in 2006.

13. SALTO YOUTH

[<https://www.salto-youth.net>] stands for Support, Advanced Learning and Training Opportunities for Youth. It works within the Erasmus+ Youth and the European Solidarity Corps programmes. SALTO-YOUTH is a network of seven Resource Centres working on European priority areas within the youth field. As part of the European Commission's Training Strategy, SALTO-YOUTH provide non-formal learning resources for youth workers and youth leaders and organises training and contact-making activities to support organisations and National

Agencies (NAs) within the frame of the European Commission's Erasmus+ Youth programme, the European Solidarity Corps, and beyond.

On the website www.salto-youth.net will find lots of tools:

- European Training Calendar is where you will find training and seminars run by SALTO, European Solidarity Corps Resource Centre, Erasmus+ NAs and NGOs in the youth field. One goal of the European Training Strategy is to support competence development of youth workers working internationally, as well as young people in learning mobility projects. In an era where online learning becomes more and more prominent and an integral part of learning spaces, a few online courses for youth workers have been developed. Directly connected to the ETS or not, youth workers might find here the courses that they would benefit from.
- Toolbox for Training contains hundreds of tools and activity ideas for youth work. Hundreds of useful tools for learning - for youth work and training activities! Created to help you find and share useful training Tools, the Toolbox for training is an online catalogue you can browse through freely or even contribute to!
- Atlas Partner Finding puts in touch with thousands of youth projects, so you can build strong partnerships and apply for Erasmus+.
- Trainers Online for Youth is SALTO directory of over 500 trainers, who can deliver your international training activities.

The seven SALTO-YOUTH Resource Centres have several joint tasks such as developing training resources, sending regular newsletters about European YOUTH priorities, providing a European Training Calendar, making experienced European youth trainers accessible and evaluating the training activities.

3.5.2. EU-funded projects

The Erasmus + programme aimed to help generations of Europeans to become active citizens, with the skills, knowledge and experience to tackle the challenges facing our society, both now and in the years to come. These include

rising unemployment, climate change, economic and post-conflict migration, digitalisation, globalisation, physical inactivity and the multilingual structure of Europe's united but diverse nations.

With a EUR 14.7 billion budget for the period 2014-20 Erasmus + provided opportunities for over 4 million people through formal and non-formal learning, transnational mobility, exchange of good practices, volunteering and solidarity, while recognising the potential of sport to promote cooperation, both within and across frontiers.

Erasmus + projects addressed many of the challenges that Europe faces, both now and in the years to come. There were projects that help us move towards a more circular, green economy, where little is wasted, and pollution is minimized. Other projects nurture the democratic process in Europe and its influence globally. There are projects that focus on inclusion of those who are socially or economically marginalized, while others help prepare today's youth for an increasingly digital world.

A digital Europe needs digital skills.

There are so many ways in which we can foster digital skills among EU citizens. It is important that we share information on the many good practices across Europe, to see what is working well in one country and replicate it in others, adapting to the specific local needs and demands. The European Commission, with the contribution of the Digital Champions, has identified some great projects that could be an inspiration for other similar initiatives, that could also be supported by the European Social Fund.

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The next projects are "just" good examples of the amazing creativity, passion and hard work of so many individuals and organizations – who all believe that, indeed, "a digital Europe needs digital skills":

- The IT for SHE project [<http://www.itforshe.pl/en/>] in Poland encourages and trains women for digital-age careers – helping them find work in a traditionally male-dominated sector. The goal of the IT for SHE program is to help talented women studying IT with entering the job market. It includes Europe's biggest themed camp for young women in IT – Women in Tech Camp, a mentoring program at the best technology companies and a volunteering campaign in small towns, encouraging children to learn programming.
- The Make IT Work programme [<https://it-omscholing.nl/>] in the Netherlands is training non-IT university graduates for new careers in IT. In parallel, employers participating in the fast-track training partnerships gain access to the high-quality specialists they need to provide services and grow.
- The main aim of "Youth Marketing Policy Makers for Sustainable Development" [<http://youmust.org>] was to develop the capabilities of participating organizations through gaining creative marketing knowledge for increasing the awareness especially of public authorities and business sector about the three pillars of sustainable development [SD]: economic, social, and environmental benefits. Previous experiences from preceding activities realized from consortium members, primarily based on achieved outcomes in Erasmus+ projects encouraged us to develop the idea of CBY to cooperate and exchange the best marketing practices and promotion tools for creating policies and implementing imaginative campaigns for SD using social media.
- Sweden's Digilyftet pilot project [<https://mitc.se/en>] has helped small and medium-sized industrial sector companies overcome the significant barriers to using digital technologies – a means to become more competitive and grow their operations.
- School of Data [<https://schoolofdata.org>] is a global network of individuals and organisations who train civil society, journalists, and citizens

with the skills they need to use data effectively. Through global network of data literacy practitioners and trainers, School of Data seeks to address this data skills gaps to amplify the messages of civil society using data. We level the playing field by ensuring that civil society organisations and newsrooms have the knowledge, resources, and tools they need to participate fully in the information age.

- The EduHack online course [<https://eduhack.eu>] aims at empowering university educators from every discipline who want to learn how to produce digitally supported learning experiences, with a focus on fostering collaborative learning and enhanced students engagement. Individual users are welcome to browse (and use or remix) the EduHack course content and to learn from them. Universities that want to implement the EduHack online course and to certify the achievements of their participants are welcome to do so by using the EduHack Toolbox, and by joining the EduHack Network.

3.6. Digital Transformation For Europe's Resilience

In the world of tomorrow, if we want to be the master of our own destiny, confident in our means, value, and choices, we must rely on digitally empowered and capable citizens, a digitally skilled workforce and way more digital experts than today. This should be fostered by the development of a high-performing digital education ecosystem, as well as by an effective policy to promote links with and attract talent from all over the globe. Digital skills will be essential to reinforce our collective resilience as a society. Basic digital skills for all citizens and the opportunity to acquire new specialized digital skills for the workforce are a prerequisite to participate actively in the Digital Decade (European Commission, 2021c, p. 4).

Figure 1 Four Cardinal Points For Mapping The Eu's Trajectory



Source: https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en#next-steps, accessed 17.05.2021

On 9 March 2021, the Commission presented a vision and avenues for Europe's digital transformation by 2030.

The EU's Trajectory the Commission proposes to set up a Digital Compass to translate the EU's digital ambitions for 2030 into concrete targets and to ensure that these objectives will be met. The Compass will be based on an enhanced monitoring system¹⁰, to follow the EU's trajectory regarding the pace of a digital transformation, gaps in European strategic digital capacities as well as the implementation of digital principles. It will include the means to deliver the vision and set out key milestones along four cardinal points. The first two are focused

on digital capacities in infrastructures and education & skills, and the two others are focused on digital transformation of business and public services

The Digital Compass Communication maps out a clear path towards a common vision and actions for Europe to succeed in the Digital Decade, at home and in the world. The involvement and commitment of the youth and of all stakeholders is crucial to achieve a successful digital transformation.

4. CASE STUDIES ON THE EXISTING PRACTICES ON DIGITIZATION AND VIRTUAL MOBILITIES DURING THE PANDEMIC

The Covid-19 pandemic is affecting all aspects of life all around the globe, with societies attempting to deal with the consequences of such a major disruption. Young people have been particularly affected by the crisis, facing unprecedented levels of uncertainty, anxiety, and stress. They are often cut off from their formal and non-formal education opportunities and even deprived of their access to public spaces where they can socialize, learn, and have fun. Their private space and autonomy are limited, and, in many countries, their mobility is restricted.

The youth work organizations and youth work community (trainers, youth workers, facilitators, moderators) have been negatively affected by the pandemic: travel and gathering restrictions, lockdowns, curfews, closure of borders, limited access to public spaces have all impacted their projects. The limitations and reallocation of available funds as well as the inability to do self-financing and fundraising activities have had a major impact on youth work. Studies indicate serious shortage and difficulties in financing administrative and everyday activities, which in return result in cuts in projects, activities, and staff costs. The negative consequences faced by youth work will inevitably be reflected in learning mobility: there will be fewer organisations and staff and fewer opportunities for mobility projects. Youth organisations which are inactive for a certain time period also face the risk of loss of social capital and networks.

Youth workers are also facing major difficulties. Economic difficulties as a result of loss of income or loss of employment are very common. Furthermore, the youth

work community needs time, support, and guidance to deal with the consequences of the pandemic and the changes in youth work. Going online through virtual exchanges, for instance, requires youth workers to learn new skills and build their digital competences in order to prepare themselves for working within the new environment. You can find the [the overview of the existing practices on virtual learning mobilities and Erasmus+ projects on digitalization in partnership countries.](#)

The EU-Council of Europe youth partnership has been collecting and sharing a series of extensive research on Covid-19 and youth through its [Knowledge Hub](#). In this hub, a series of desk studies and reviews are available, including the briefing focusing on different aspects of the impact of the pandemic on youth. [Briefing 1: An Introduction to Research on the Impact of Covid-19 on the Youth Sector](#) by Lavizzari et al. gathers a significant body of studies, analyses, surveys and policy documents on Covid-19 and summarises their main findings, finishing with a list of further issues that need to be investigated.

Erasmus students, for example, were able to enrol in September 2020 with no guarantees to travel; some universities did not invite them to their campuses and only offered online classes, while other universities engaged in “blended mobility”, “which will allow students to learn remotely, with a chance to go abroad if and when circumstances allow” (Naujokaitytė, 2020). The European Commission issued its own guidelines on virtual mobility, according to which: “ It is possible to start mobility periods virtually in the autumn if starting the mobility period physically in the host country is not possible due to exceptional circumstances. However, it is obligatory to complete a part of the mobility period in the host country when the circumstances allow for it; it is not possible to award grants for solely virtual exchanges.

(Finnish National Agency for Education, 2020)

In comparison, the operation of transnational projects funded under Erasmus+ KA2 and KA3, was less drastically affected by the COVID-19 mitigation measures than youth mobility and volunteering activities. This was due to the longer-term nature of the strategic partnerships, which allowed partner organisations some flexibility to adjust the project timelines and move meetings online, including occasional meetings and multiplier events. The primary challenge has been that partner organisations which projects have been working with, have been closed under COVID lockdown. Overall, most of the project activities under KA2 and KA3 were either transferred into online format or postponed (e.g., in the case of planned field work or peer-learning activities) (DG EAC Representatives, 2020).

In European Solidarity Corps fully virtual mobility projects were not popular for three reasons:

- First, virtual mobility projects were not encouraged by the national agencies and the Commission at the beginning of the pandemic (Belgian and German National Agencies, 2020).
- Second, the funding available for the fully virtual projects is significantly lower than the funding for traditional mobility projects (Belgian National Agency, 2020).
- Third, out of consideration that mobility activities bring considerable benefits and cannot be replaced by fully virtual mobility programmes (French National Agency, 2020).

In many cases, organisations introduced blended mobility, allowing volunteers to start their activities remotely and travel to the host country once it is allowed by the national authorities. However, this option did not live up to expectations, mainly because organisations were not able to guarantee that at least some of the activities would take place in a foreign country, which is a condition of blended mobility activities

Meanwhile, National Agencies (NAs) recognizing the value of online collaboration and the importance of assuring their activities are maintained, carried out their face-to-face events virtually: training for beneficiaries before the projects, evaluation sessions, and instructions for the European Solidarity Corps (ESC) volunteers. Due to the efficiency of these virtual activities, NAs are considering similar virtual interactions in the post-pandemic future (French National Agency, 2020). All Training and Evaluation Cycle TEC (pre-departure training, on arrival, midterm and final evaluations) for the European Solidarity Corps Volunteers, for example, in Flemish NA Belgium were fully online as of March 2020 till July 2021 (there is a plan for a residential training for end of June 2021, though under special conditions)

Erasmus+ Virtual Exchange is part of the [Erasmus+ programme](#), providing an accessible, ground-breaking way for young people to engage in intercultural learning. Working with Youth Organizations and Universities, the programme is open to any young person aged 18-30 residing in Europe and the Southern Mediterranean. Through a range of activities, Erasmus+ Virtual Exchange aims to expand the reach and scope of the Erasmus+ programme through Virtual Exchanges, which are technology-enabled people-to-people dialogues sustained over a period of time.

Erasmus+ Virtual Exchange offers a safe online community to participate in facilitated discussions, increasing intercultural awareness, and building 21st Century skills through Virtual Exchange. The programme encourages and promotes intercultural dialogue, employability, and citizenship, strengthening the youth dimension of the [EU neighborhood policy](#).

This flagship project is established under a contract with the [Education, Audiovisual and Culture Executive Agency](#), financed by the European Union's budget, and it is implemented by a consortium composed of [Search for Common Ground](#), [Anna Lindh Foundation](#), [UNIMED](#), [Sharing Perspectives](#)

[Foundation](#), [Soliya](#), [UNICollaboration](#), [Kiron Open Higher Education](#), and [Migration Matters](#).

A [Handbook](#) to provide youth organizations with all the information they need in order to engage their youth members in activities offered under Erasmus+ Virtual Exchange was developed within this project.

From the perspective of youth workers, trainers and facilitators, the situation is also worrisome. Many youth workers have faced loss of income and even lost their jobs due to cuts and closures of youth organizations and projects. Youth workers and trainers that used to work freelance are also facing serious loss of income due to the cancellation of almost all projects. Some were able to adapt and make the transition to online and digital youth work, but some of them need a transition period and additional training and capacity building. In addition, youth workers and trainers have reached their levels of knowledge and developed their competences through years of training, experience, and ongoing learning process. On the basis of a sudden and forced switch to online youth work, they need some time to *unlearn* some of their practices and approaches as well as *learn* new ones. If this transition is not supported or allowed, there is the risk of simply trying to carry everything done in the physical environment to digital space, which would severely impact the quality. It is important to start and commit to an engaged dialogue with youth workers and trainers and offer support during these times. The petition launched by the International Youth Work Trainers Guild, ["Responding to the Impact of COVID-19 on International Youth Work Mobility"](#), is an important call and should be taken into consideration.

While moving to distance learning or distance work on some youth work projects was an abrupt move in the light of the pandemic, with the prolonged experience of learning online there needs to be ongoing research and reflections on possibilities to strengthen the intercultural learning dimension in virtual learning.

While virtual mobility was already discussed in 2007 in a Green Paper on "Learning Mobility", its real potential for development was brought upon by today's epidemiological conditions. While virtual mobility is usually not the first choice (European Union 2019), it is being chosen by those who see no other option – with the pandemic still developing, young people increasingly consider this option as an alternative. There is still a need to think of tools and pedagogies for virtual learning. For youth work, this situation gives a chance to develop digital youth work, which in some countries has already been popular.

Mobility in a physical sense is a strong motivation to take part in projects in upper secondary schools, while virtual projects are not considered to be very attractive to that age group. We need to reflect on other motivations to keep international co-operation going and students to gain intercultural skills.

As indicated, virtual mobility is not considered an attractive option by many young people, so we shall reflect on going back to the notion of internationalization at home that was quite popular about 10 years ago. The youth organizations and higher education institutions often have resources at home that could bring to their students differing forms of intercultural learning. With travel limitations still in place, we should reflect on how to better use local resources and potential for intercultural learning and experiencing diversity.

5. THE IMPACT OF THE PANDEMIC ON PARTNERSHIP COUNTRIES ORGANIZATIONS IN TERMS OF DIGITISATION

Covid-19 has been labeled a pandemic by the World Health Organization as a current hazard to humankind. This epidemic has successfully caused the global shutdown of a variety of activities, including educational activities, resulting in

massive crisis-response migration of institutions to online learning as the educational platform.

The crisis-response migration methods of universities, faculty, and students, as well as challenges and opportunities, were discussed, and it was clear that online learning differs from emergency remote teaching. Online learning will be more sustainable, while instructional activities would become more hybrid, if the challenges faced during this pandemic are well explored and transformed into opportunities.

Many issues have arisen as a result of the pandemic, particularly in technology management in education. Not everyone was ready for this change, which is why we'll look at how it's affected different countries, starting with some specific organizations, and how they've handled the transition from face-to-face to virtual, whether they've had any problems or if, on the contrary, this modality has made things easier for them.

As part of the preparation activities for Intellectual Outcome 02 within the DEE-Geays project, each partner in their own country conducted research - Survey among the Partnership upon challenges meanwhile operating during Covid-19 lock down and case studies of solutions developed for reaching young people.

To unify this survey, the following questionnaire has been prepared:

1. Scope of action of each identity
2. Does your entity work with individuals or organizations?
3. Before the pandemic, what level of digitization did the entity have?
4. What level of digitization does the institution currently have?
5. What were the main problems faced by the identity during the pandemic?
6. Did the incorporation of digital tools at work contribute to solving some of these problems? If yes, in what way?

7. Brief description of any digitisation experience developed that has been of particular use to the identity.

In the project are included seven partners organizations from six countries: Association for European Cooperation Development and Communication from Belgium; "Danish Youth Team" from Denmark; Associazione Inco Interculturalita & Comunicazione and Associazione InCo (main project coordinator) – Molfetta from Italy; Association for research, education and development "Marketing Gate" from North Macedonia; "Obcianske Zdruzenie Keric" from Slovakia and Fundacion XUL from Spain (coordinator of this part of the project).

The following analysis is based on their research.

5.1. InCo- Molfetta Italy

InCo is a non-profit organization that encourages young people to go overseas. The goal is to give high-quality international experiences for young people, such as volunteering, learning, working, etc. They use a variety of tools to accomplish this, including the Erasmus+ program, ESC, Europe for Citizens, and Erasmus for Young Entrepreneurs. They assist young people in developing their ideas and passions on a local level.

They work with individuals and organizations. In **terms of individuals**, every Tuesday they have an info desk where young people can inquire about international prospects. In order to foster intercultural learning, they also arrange local events such as international evenings and literature contests. In **terms of organizations**, they assist other NGOs or government agencies in hosting volunteers and participating in EU projects. The municipality of Molfetta will have a Europa office starting in 2020. Since 2018, Inco Molfetta has been supporting schools in their dual-program work/study by housing a large number of students in our business.

In the instance of InCo Molfetta, the level of digitization has evolved in numerous ways, including the following: Workplace management (teleworking), Organizing online meetings with external parties, Task development employing digital tools, Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.)

The biggest issue that InCo Molfetta encountered as a result of the COVID epidemic was that all of its activities were supposed to be done in person in order to foster the intercultural dimension. So, the challenge was to make online activities as engaging as in-person events. Another significant issue was the pending funding position with several institutions, such as partners and the National Agency.

The use of digital tools hasn't totally fixed these issues, because it's difficult to captivate young people's attention through a screen without these socio-affective connections.

Some digital experiences, on the other hand, have been created. InCo Molfetta has found some collaboration systems, such as "ASANA," for planning activities with coworkers.

They've also established several online events using Facebook Live, such as a weekly music competition conducted by our youngsters.

The organization has experienced various obstacles as a result of the pandemic. The biggest challenge that InCo Molfetta faced was working without knowing whether or not they would receive funding from their stakeholders. Living in a state of insecurity, unable to prevent or organize anything. In this pandemic, there is no horizon, and they were unable to establish long or short-term plans.

This pandemic, on the other hand, has resulted in the development of master concepts and information that were previously unavailable. These were: in the instance of InCo Molfetta:

- 1 - Digitalization can be helpful, but it cannot take the place of face-to-face interaction.

2 - It's a fantastic chance to save unnecessary travel.

3 - In a few simple steps, you can talk to a larger group of people: a solid video, a good marketing campaign, and a straight-to-the-point message.

5.2. CODEC (Belgium)

CODEC Europe stands for the Association for European Cooperation, Development and Communication. The objective of the organization is to promote European policies and values that will improve the economic and social well-being of people around the world. You'll meet design thinkers, project managers, communicators, educators, and technology and social media experts at CODEC who can respond to your organization's needs and understand the societal concerns you want to address.

Participation is important to their creation and is at the heart of their methodology. People of different ages are involved in CODEC projects and campaigns. They take a concept, share it with the protagonists, and encourage them to participate enthusiastically. Their work is built on the following principle: entrusting people to define an issue that is important to them, learn about it, imagine alternative solutions, and then act to solve the problem and bring about change.

CODEC works with both individuals (young people and youth workers +18) and organizations (young people and youth workers +18) (NGOs, state authorities...). To raise awareness of European policies and ideals among the general public by promoting projects.

In the instance of CODEC, the level of digitisation has evolved in numerous ways, including the following: Conducting internal online meetings, as well as external online meetings, Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.), Participation in online events, CODEC constantly use digital tools and teleworking was the norm for them.

The main problem for CODEC, facing the pandemic, were the local restrictions and the inability to run local events. Furthermore, the incorporation of digital tools did not solve those problems.

Regarding the development of any digitisation experience, CODEC hasn't had any recent digitization experience - teleworking has always been the standard for them, so they're used to running partner meetings via zoom/teams.

However, CODEC has faced a number of problems during the digitization process, including expensive costs for limitless high-speed internet in Belgium. The use of personal WhatsApp numbers, Facebook messengers, and other social media for work purposes is causing a blurring of personal and professional lives. As a master idea, CODEC mastered zoom like never before, proving that they can manage an international project without ever really meeting our partners.

5.3. Marketing Gate (North Macedonia)

Marketing Gate's vision is of a society without economic boundaries, where human rights are upheld, and discrimination is abolished.

Marketing Gate works with both individuals and organizations as their objective is to create a safe, courteous, and festive environment with structured non-formal learning in which young people can receive the basic economic information needed to establish a business and promote long-term growth.

In the instance of Marketing Gate, the level of digitisation has evolved in numerous ways, including the following: Internal meetings can be held online. Organizing online meetings with external parties, Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.), Internal training (work teams and/or partners) and the use of digital tools.

Marketing Gate, like other entities, has struggled as a result of the pandemic. The key issue was the implementation of international projects that required the holding of face-to-face meetings and events (trainings). As CODEC, Marketing Gate's problems were not solved by the incorporation of digital tools because it is extremely difficult to take out face-to-face international events or initiatives in an online manner.

Despite the fact that the epidemic has made moving forward with face-to-face projects extremely difficult, Marketing Gate has had a favorable experience with digital platforms (Microsoft Times, Zoom, Google Hangout Meet).

Last but not least, they face no obstacles in their digitization process because they took advantage of the benefits of digitalization even before the COVID-19 outbreak.

More and more people, regardless of age or level of education, have embraced digitalization, which was a master notion of their digitization process.

5.4. InCo (Italy)

Interculturality & Communication Association (InCo) is a non-profit organization founded in 2004 by a group of friends who sought to foster international exchange, mutual understanding, and intercultural sensitivity in young people.

InCo's mission is to promote international youth exchanges by increasing and strengthening cross-cultural contact, developing intercultural sensibility, and preventing and combating racism, prejudice, and social exclusion.

Youth mobility initiatives are an essential part of the association's activities: through "Youth," young people can go to another country for a youth exchange, a volunteer experience, or a vocational training project. The association's activities are aimed solely towards teenagers.

InCo serves as a sending organization for EVS volunteers as well as a coordinator for many host initiatives that host independent volunteers (MTV and LTV). Working with young people, their end target groups, on a national and regional level, while working with organizations on an international level, is the focus of InCo.

Several aspects of the entity's digitisation have changed as a result of the pandemic: Workplace management (teleworking), Internal meetings can be held online. Organizing online meetings with external parties, Task development using digital technologies, Organizational process development utilizing digital tools Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.), Participation in online events, Internal (work teams and/or partners) training.

During the pandemic, InCo, like the other identities, had certain issues. The primary challenge posed by the pandemic in 2020 was the inability to move into online space right away, so most of the activities that were scheduled to take place in person had to be canceled unless we could discover ways to perform some of them online (which we still couldn't do).

In the case of InCo, the incorporation of digital tools at work contributed to solving those problems. Due to the incorporation of various digital tools, they were able to host some of the meetings (for example, training inside the solidarity initiatives) online (e.g., learning how to use the Zoom breakout rooms and other tips).

Regarding the digitisation experiences, InCo has developed some. They learned how to use Zoom and other tools in a more structured and strategic way, such as zoom breakout rooms or creating online events like youth center consultations with well-managed waiting rooms in Zoom (such as in presence, when a person arrives and waits for his or her turn in order to get a personal counselling meeting). They might also improve their usage of platforms like jamboard, padlet, and others so that they can have online workshops.

Nevertheless, some challenges had to be faced. In InCo's case the lack of systematic training/experience in adapting non-formal learning interactions to the internet realm.

On the other hand, they were able to glean some key insights from this unusual experience: creativity (using innovative solutions to make online meetings "less boring" - for example, investing more in creating online presentations with a wider range of tools - video creation, meme creation, etc.), using Jamboard for group brainstorming sessions, and exploring Zoom and other online meeting platforms.

5.5. [Danish Youth Team \(Denmark\)](#)

Danish Youth Team is a non-profit organization that focuses on young people, youth workers, and instructors who wish to travel, learn, and share their culture.

They work with both individuals and organizations; they are addressing both individuals and comparable organizations from all around the EU and beyond in order to provide our youth and youth workers with a wide range of personal and professional development opportunities.

A change has been produced regarding the level of the digitization of the organisation in different levels: Workplace management (teleworking), Internal meetings can be held online. Task development employing digital tools, the planning of online events (conferences, courses, meetings, etc.), Participation in online events, The creation of digital tools Digital tools are used. Internal (work teams and/or partners) training.

The main problems faced by the Danish Youth Team were not being able to organize physical meetings, activities (such as youth exchanges), or other Erasmus+ projects.

As InCo, the implementation of digital tools helped the [Danish Youth Team](#) to solve those problems, as they were able to cope with the Covid-19 lockout and continue their activity in the online field with the support of digital tools.

The Danish Youth Team has relocated the majority of their meetings on Zoom. They also began to use Jotform to build various surveys, registration forms, and other forms, which greatly aided us in the digitisation process.

The organization's biggest problem was locating the appropriate instruments for moving our activities into the Internet realm. We needed to choose the best alternative for meetings (Zoom platform), virtual training courses and youth exchanges, surveys, and so forth. They also suffered additional costs as a result of the tools they used (e.g. subscriptions, licenses, etc).

They discovered as master ideas that the majority of physical activities may be very successfully organized online. Using a digital project management platform, the firm also improved their team management process (ClickUp).

5.6. [KERIC \(Slovakia\)](#)

KERIC is a non-profit, non-governmental youth organization that works with Kysuce region children and young people aged 7 to 30, as well as adults. They provide a variety of international activities that help children and young people develop their personalities and are tailored to the needs of individuals and groups. They are attempting to link our Kysuce region to Europe and, eventually, the rest of the world.

Mirka Petrková and Ivka Hruková launched KERIC in February 2003 in response to the needs of local youngsters. Children are offered the opportunity to complement their English education in a different method here. One of the organization's first tasks was to enlighten people about the benefits of the Slovak Republic joining the European Union, hence the name Kysuce European Information Center, or KERIC.

KERIC grew over time, adding more and more possibilities for local inhabitants as well as international volunteers to develop their personalities. Hundreds of thousands of young people worldwide take advantage of the opportunity to

travel and encounter unique experiences in different places. Volunteers from all over the world come to adca every year to share their culture, customs, and languages via exciting activities. Volunteering news and updates.

They also send groups of young people aged 13 to 30 to participate in international youth exchanges all around the world. The goal is to meet young people from various countries, spend time with them (between 6 and 14 days), collaborate during activities, and converse in a foreign language. Young people obtain fresh experience, knowledge, and contacts in this informal setting.

KERIC also hosts monthly educational activities for local youth, such as workshops on interesting themes, weekends, webinars with special visitors, creative workshops for school clubs, and the highly famous International Christmas. They prepared virtual Escape rooms for children during online lessons.

Everything they do is enjoyable for them. KERIC is always adapting to new situations and learning new things. They attempt to fill in the gaps in society in a way that makes sense and assists people in realizing their visions and meeting their needs. They provide a safe environment for young people to express themselves and implement their ideas. In a creative and open manner, they also tackle themes that are rarely spoken. Every setback propels them ahead, and everyone will benefit as a result.

As we have seen they work with both individuals and organizations.

The level of digitization has changed due to the pandemic in different ways: Workplace management (teleworking), Internal meetings can be held online. Organizing online meetings with external parties, Task development employing digital tools, using digital tools to develop organizational processes Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.), Participation in online events, The creation of digital tools Digital tools are used. Internal (work teams and/or partners) training.

The main problem faced by KERIC was volunteers' exhaustion from being under lockdown and receiving different EVS than expected. By the way, the

implementation of digital tools has contributed to solving those problems because they were maintaining a busy schedule, creating new seminars, and maintaining communication with students, schools, and the community.

KERIC has also developed some digitisation experiences such as producing interactive intercultural learning programs for schools, such as EUROWEEK, global citizenship escape rooms, and well-being workshops. The main challenges faced in their digitisation process were fatigue, exhaustion from doing everything on the internet.

However, KERIC has also taken advantage of this situation, coming up with master ideas such as: Meetings and learning methods that are more successful, reaching a larger audience, faster communication with international partners, and stronger marketing of activities.

5.7. XUL Foundation (Spain)

XUL Foundation is a branch of the XUL agency of communication for social change. It was created in 2007 and its aim is to develop communication actions for social change and promote social transformation processes that foster social and environmental sustainability, contributing to the collective and participatory construction of a plural and fair society, and solidarity.

The XUL Foundation's operations are carried out using communication models that favor new forms of association and relationship. As a result, we consider the promotion of networks and the total of synergies to be transversal, as well as equitable chances without regard to gender, ethnicity, or position, and respect for one's own identity as well as the cultural and environmental values of different communities.

The foundation employs social innovation to address issues that are important to them, such as public governance and citizen cooperation, urban sustainability, and improving the lives of the poor.

Xul Foundation contributes to the collective and participatory construction of a plural, fair, and supportive society by designing and promoting communication actions for social change and social transformation processes that promote social and environmental sustainability at the regional, national, and European levels.

Young people are their primary target audience, and the social laboratory is our primary tool.

Xul Foundation, like the other entities, works with both individuals and organizations. They collaborate with young people in working groups surrounding the social lab, as well as with other organizations in various European initiatives and as members of social organization networks like the Córdoba Social Lab.

As we all know, in the aftermath of the covid pandemic, all activities were shifted to the digital realm, which is why the Foundation was established. As a result, the degree of digitization has shifted in the following areas: Workplace management (teleworking), Internal meetings can be held online, organizing online meetings with external parties, Task development employing digital tools, using digital tools to develop organizational processes Creating educational activities with the help of digital tools, The planning of online events (conferences, courses, meetings, etc.), Participation in online events, Digital tools are used.

However, the pandemic was not without its difficulties, and it brought with it a slew of digital-related issues. The Xul Foundation was confronted with a variety of issues, including: Several training and group processes in which we played an organizing/dynamizing role were halted, and some have yet to be restored.

The social lab they were working on at the time was still being digitized, but the group had fragmented, and many members had left due to the inability to carry out the planned measures. The activity was performed, but the results were less than ideal.

Due to the loss of projects and, as a result, money, the Foundation's staff had to be downsized.

Despite the disadvantages, the use of digital technologies assisted in the resolution of some of the challenges that were initially encountered. Although some of the proposals to digitize and sustain the processes (both the training procedures and the dynamization of groups such as the lab) were rejected, the Foundation positioned itself to be able to respond in a way that was appropriate for the digitalization context.

Furthermore, the Foundation was able to develop digital experiences. IYE LABS and Plastico Lab, both social laboratories with a strong experiential and socio-affective component, have had their methodologies digitized

Even though the digitisation process was and continues to be relatively new, which is why, despite its success, the foundation faced several problems in the digitisation process: Knowing what to look for in digital tools and how to use them effectively. There is no digital divide since everyone has access to the tools (equipment, connection networks, knowledge, etc.), Access to training and up-to-date information that is tailored to new situations, Skills in invention and creativity are being developed and Dynamization of the group to maintain motivation and interest.

Despite the difficulties, there is always light at the end of the tunnel in life, and the Foundation, despite experiencing barriers along the way, was able to gain a lot of knowledge from this experience.

The following were the key learning objectives: So that the group does not lose interest or become bored, processes should be shorter and more intense. To keep people's attention on the screen, audiovisuals (films, presentations, etc.) should be used in conjunction with the spoken word (discussion groups, plenary sessions, etc.) and other gamification tools. We must develop the ability to be surprised.

6. E-LEARNING PLATFORMS AND MOOCS FOR THE NON-FORMAL EDUCATION SECTOR

In the new era of learning, technology plays a fundamental role in the processes of non-formal education via e-learning platforms and MOOCs which are facilitating the communication between teachers/trainers and individuals willing to learn new things.

The need of Massive Open Online Courses (MOOCs) has been on the rise in the recent years, especially due to the covid-19 pandemic. Therefore, MOOCs were developed with the purpose of giving autonomy to anyone willing to acquire new knowledge through non-formal education, providing an affordable and flexible way to learn new skills, and delivering quality educational experiences at scale.

Let's take a look over several examples of e-learning tools and MOOCs that were developed by Danish Youth Team in partnership with several other stakeholders within the frame of the Erasmus+ programme.

6.1. E- Entrepreneur Moodle Course

The online course provides several e-learning modules, all accessible via MOODLE platform, to youth workers and professionals working the field of e-commerce and online entrepreneurship.

Moreover, it can be considered an educational product aimed to empower the youth workers by offering them a new type of entrepreneurial learning based on the use of e-commerce tools.

Nevertheless, all the contents of the e-learning modules are free to download from the platform, giving the users the option to print them out, in case they prefer so.

Upon completion of the e-learning modules, participants are receiving an official certificate issued on behalf of the project consortium.



6.2. Youth Entrepreneurship Education Moodle Course

The course aims to consolidate the role of youth workers in promoting youth social entrepreneurship by enriching them with the

right knowledge and particularly with the technical know-how to work with the MOODLE platform.

Nevertheless, the course is part of "YSEEAM" Capacity Building in the field of Youth ACPALA, taking roots on the threshold of an approaching Fourth Industrial Revolution in which automation and massive digitalization are predicted to radically alter the status-quo relation between trainers-trainees, youth workers-youths and their place in the learning process.

At the same time, the course aims to enhance the entrepreneurial knowledge and relevant youth work skills such as lab-styled learning, digital youth work and so on, making youthworkers ready to a flexible life-long learning process.

6.3. Cultural Mediator Self-Assessment Tool

The self-test it's an online MOOC tool through which the youth workers and trainers can evaluate their approaches and attitudes on multiculturalism and to receive feedback for their personal development in the field of non-formal education. This tool consists of some basic questions, case study examination, as well as social and emotional tests to generate optimum learning outcomes and improved performance of their skills on the transmission of multiculturalism.

Assessing attitudes, practices and structures of youth workers is a necessary, effective and systematic way to plan for and incorporate cultural competence during the cultural diversity's management and mediation.

Moreover, this tool has the role to come up with suggestion for a better portray of cultural diversity issues, but also as a practical assessment that shall encourage each participant and other beneficiaries to take the personal development issues in consideration while implementing their activities on the promotion and transmission of cultural diversity.

The self-test is based on non-formal learning methods and will provide to those who reach the passing score with a badge. This will provide the youth workers

with a timely and effective feedback in terms of self-evaluating their own multicultural skills and non-formal education in general.



7. MAP OF CULTURAL DIVERSITY: CREATIVE TOOL E-LEARNING MATERIAL DESIGNED FOR YOUTH WORKERS



The Map of cultural diversity is an innovative and totally creative tool for youth workers and trainers who are active in non-formal education, but also for the future ones, to transfer educational objectives about cultural diversity and intercultural equality into practice.

Nevertheless, The Map is developed in printed pocket handbook format in English and several other languages. Simultaneously, the handbook can be used as an e-learning material, as it was designed for online use as well.

7.1. Udemy

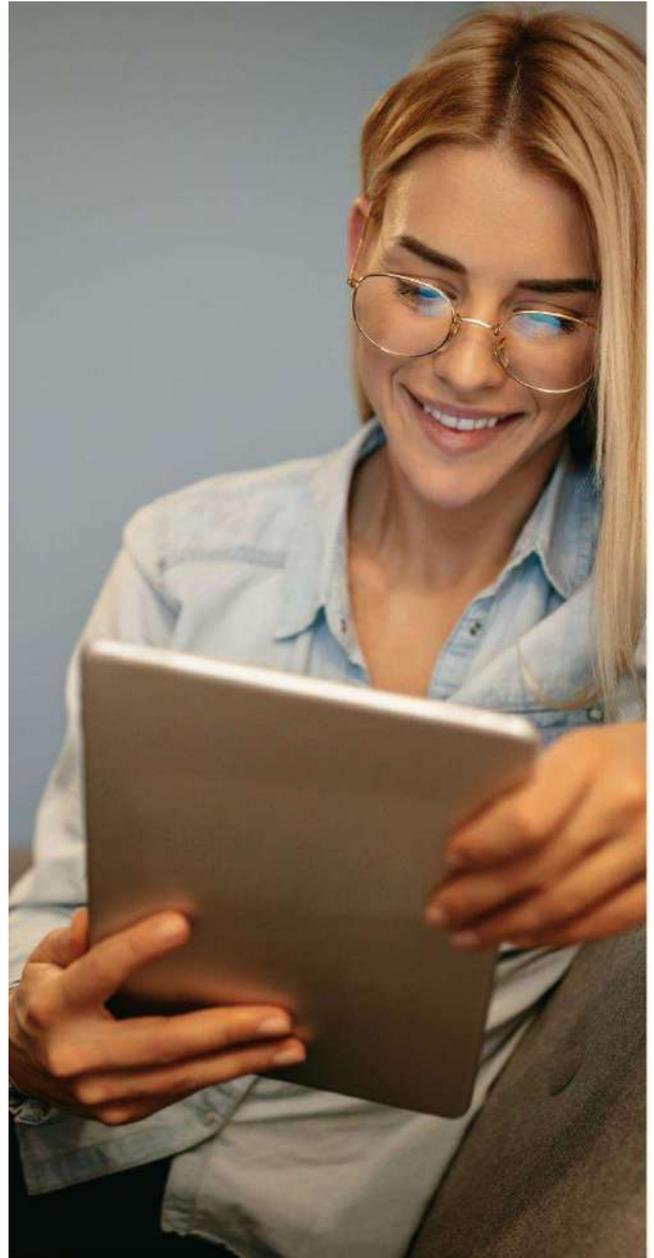
Udemy, Inc. is a massive open online course (MOOC) provider aimed at adults, students, youth workers, young people and individuals willing to study online.

The platform that allows instructors to build online courses on their preferred topics. Using Udemy's course development tools, they can upload videos, PowerPoint presentations, PDFs, audio, ZIP files and live classes to create courses. Instructors can also engage and interact with users via online discussion boards.

Courses are offered across a breadth of categories, including business and entrepreneurship, academics, the arts, health and fitness, language, music, and technology.

Most classes are in practical subjects such as Excel software or using an iPhone camera.

Udemy also offers Udemy for Business, enabling businesses access to a targeted suite of over 7,000 training courses on topics from digital marketing tactics to office productivity, design, management, programming, and more. With Udemy for



Business, organizations can also create custom learning portals for training purposes.

7.2. Code Academy: MOOC Platform Offering Coding Courses



Codecademy is an online interactive platform that offers free coding classes in 12 different programming languages including Python, Java, Go, JavaScript, Ruby, SQL, C++, C#, Swift, and Sass, as well as markup languages HTML and CSS.

The platform aims to give anyone in the world the ability to learn the skills they would need to succeed in the 21st century. Nonetheless, they created an interactive way of learning — making it engage, flexible, and accessible for as many people as possible.

Since then, the platform has helped millions of people worldwide unlock modern technical skills and reach their full potential through code.

7.3. Duolingo: Private Tutor Experience through online technology

Duolingo is a language-learning MOOC available online via website and mobile app. The company uses a freemium model: the app and the website are accessible without charge, although Duolingo also offers a premium service for a fee.

The platform is not just a game, as it is based on a specific learning methodology proven to foster long-term retention and a curriculum aligned to an international standard. In the meantime, Duolingo is also a communication tool by taking a functional approach and focusing on what learners want to do with a foreign language.

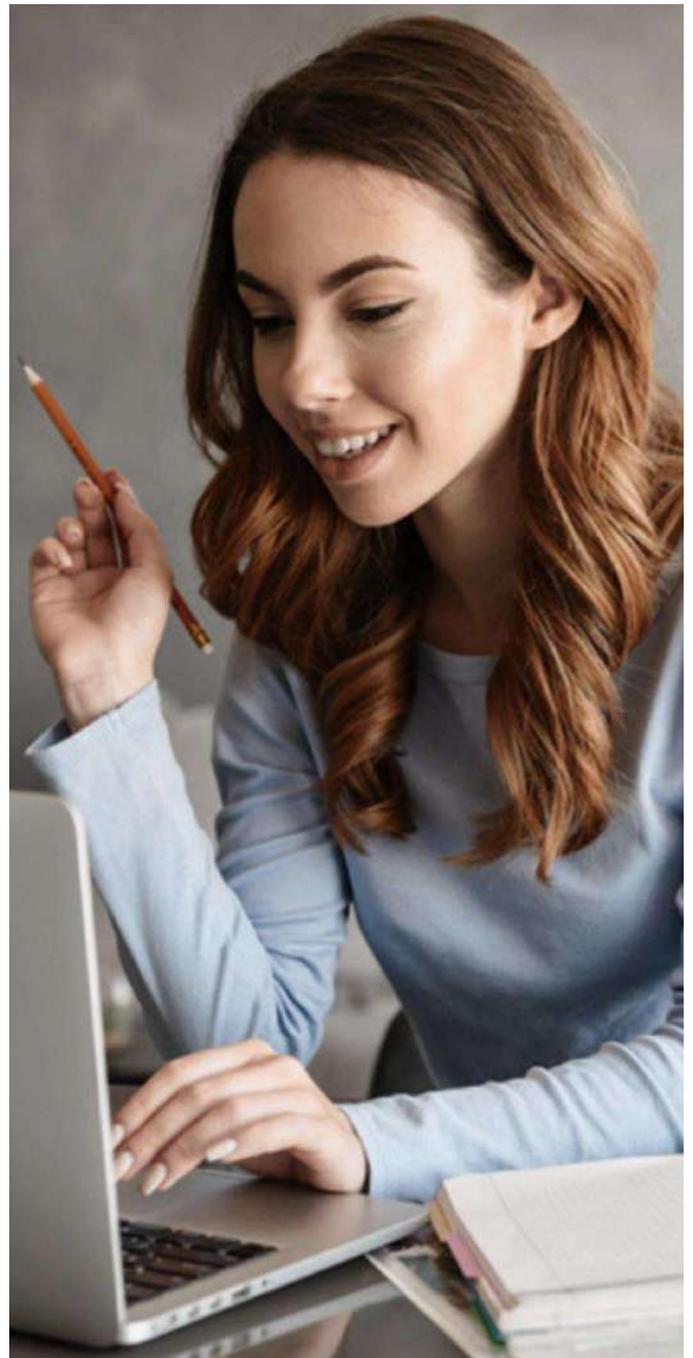
Duolingo allows learners to discover patterns on their own without needing to focus on language rules — the same way they learned their first language as a child. This approach, called "implicit learning," is ideal for developing a strong foundational knowledge of a language and its rules.



7.4. Coursera

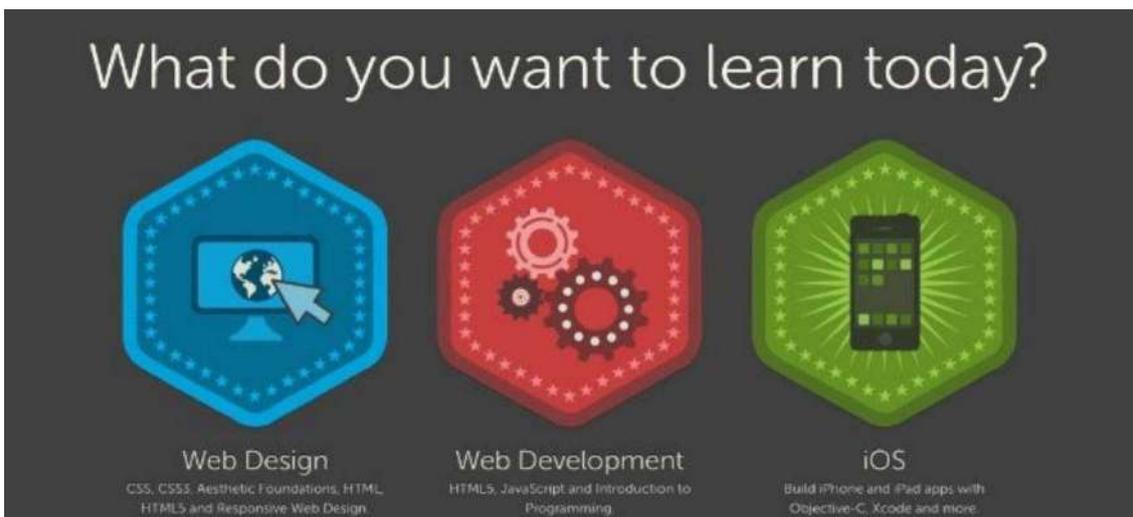
Coursera was founded in 2012 by two Stanford professors and is one of the largest massive open access MOOC in the world. The platform partners with 190 companies and universities to provide fully remote and self-paced learning opportunities leading to digital certificates at the undergraduate, graduate, and postgraduate levels. Coursera boasts a high satisfaction rate, with 87% of users reporting career benefits.

The catalog contains over 3,900 courses and specializations that span areas like business, computer science, physical science and engineering, arts and humanities, and language learning. Coursera also offers affordable online degrees through its partner schools. Students can earn a Master of Science in accountancy from the University of Illinois or a global Master of Public Health from Imperial College London.



Nevertheless, coursera partners with more than 200 leading universities and companies to bring flexible, affordable, job-relevant online learning to individuals and organizations worldwide. We offer a range of learning opportunities—from hands-on projects and courses to job-ready certificates and degree programs.

7.5. Treehouse



Treehouse is a MOOC that offers beginner to advanced courses in web design, web development, mobile development, and game development. Its courses are aimed at beginners looking to learn coding skills for a career in the tech industry.

The Treehouse learning program includes videos combined with interactive quizzes and code challenges.

Their mission is to diversify the tech industry through accessible education, unlocking the door to opportunity, and empowering young people and individuals to make the most out of the online learning tools available on the platform.

7.6. iversity: MOOC platform delivering 60+ online courses



Based in Berlin, Iversity partners with a variety of companies, non-governmental organizations, and universities across Europe to deliver more than 60 courses in English, German, and French. The platform maintains industry standards with the help of web designers and UX developers, ensuring the highest levels of usability and student engagement. The organization also offers corporate training services through its "iversity for Business" initiative.

Individuals can access traditional MOOCs or fast-paced "Espresso" classes in areas like data-driven marketing, international labor standards, and climate change and health. Iversity also offers intensive "Pro" courses that require candidates to pay a tuition price. Students can save money by bundling "Pro" classes.

8. TECHNIQUES AND METHODOLOGIES ON DIGITAL LEARNING

The tools discovered have been divided into eight subject categories.

A comparative analysis will be conducted within each block to provide information about the utility of utilizing one tool over another in a specific context or activity.

Below is a list of the themed blocks and the tools that go with them. Please see the document related to each block for more information.

BLOCK	TOOLS
01. Video Conferences and meetings	Google classroom, Zoom, Cisco WebEx, Google meets, Skype, Gather.Town
02. Gamification and group dynamisation	Kahoot, Edmodo, Socrative, Classcraft, Trivinet, Quiver, Mentimeter
03. Production of documents, infographics, and presentations	H5P, Wirewax, Canva, Picmonkey, Infogram, Pixlr, Piktochart.
04. Development of surveys, timetables, and participatory processes	Padlet, Doodle, Google forms, SurveyMonkey, Google calendar
05. Audiovisual narrative	Thinglink, StoryForm, Readymag, Sutori
06. Cartographic and temporal narrative	Google maps, Map hub, Storymap
07. Visualisation, interpretation, and organisation of data	Flourish, Piktochart, Online Chart Tool, ChartGo, Plotly, Creately
08. WebSite Creation	Wix, Wordpress, Site123, Joomla!, Webnode

8.1. Tools For Video Conferences and Meetings

This section includes and compares the most commonly used tools for virtual meetings and gatherings.

NAME	Google Classroom
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BRIEF DESCRIPTION	Google Classroom is a learning management system (LMS) that aims to simplify creating, distributing, and grading assignments and engaging students in learning online or remotely. Google Classroom is a free application designed to help students and teachers communicate, collaborate, organize and manage assignments, go paperless, and much more!
UTILITIES	
It allows you to manage your classes online, and can be used for face-to-face learning, 100% distance learning, or even blended learning. Documents can be created, information can be shared in different formats, meetings can be scheduled and conducted virtually. Students can also access their classes, notes or homework assignments from any device.	
EASE OF USE	No prior knowledge is required. Easy to use for all audiences
ACCESSIBILITY	<p>It is aimed at students of all ages as well as teachers. It is also suitable for students with special needs. It is a tool created so that all students can learn in one way or another without any of them being left behind.</p> <p>To meet the needs of all learners, technologies have been designed to help educators adapt learning to individual learners, including those with vision or hearing impairments, physical disabilities and diverse approaches to processing new information.</p>
LANGUAGES	42 languages
PRICING	Yes
EXTRAS	It's worth it
PROS	
<p>As a tool to support face-to-face education, multiple advantages can be cited.</p> <ul style="list-style-type: none"> • This tool encourages collaborative work, provides information in real time and complements face-to-face education perfectly. 	

- It encourages ubiquitous learning where students organise their own time to access resources.
- There is a permanent exchange of ideas and information. Even if a discussion has been interrupted in the classroom due to lack of time, it can be continued in the tool.

It also has advantages as a tool for carrying out flipped classroom processes:

- The student becomes, from the first moment, the protagonist of his or her own learning.
- Students are active subjects, they acquire responsibility, interact and participate. They have a high degree of commitment to their own learning.
- Extensive time to review theoretical concepts and use the class to resolve doubts, individually or even collectively.
- Diversity of learners catered for. Teachers commission diversified activities adapted to all types of learners.
- More meaningful learning. Less memory and improvement of learning that lasts over time, that really helps them to defend themselves in society.
- Development of competences through the use of ICT, collaborative work, student autonomy, etc.

CONS

- An uninterrupted Internet connection is required for proper operation.
- Network instability may result in the session having to be stopped unexpectedly.
- The documentation provided by the teacher may not be properly checked, due to the amount of inaccurate information found on the Internet.
- There may be students who make less effort to do their homework, due to poor copy/paste practice.
- Addictive use of new technologies can lead to neglect of other aspects of daily life.
- It can lead to isolation, if a suitable platform is not used to encourage real interaction with others.
- The teacher invests a lot of time in producing the materials, which means more work for him/her.
- Spending too much time in front of a screen can lead to health problems.
- Incompatibility with SCORM content and Learning Tools Interoperability.
- Limited Google ecosystem.
- Not an LMS platform, lacking features offered by other learning management systems.



NAME	Zoom
BRIEF DESCRIPTION	Zoom is a cloud-based video conferencing service that you can use to meet virtually with other people, either by video or audio only or both, all while conducting live chats, and allows you to record those sessions for later viewing.
UTILITIES	
<ul style="list-style-type: none">• One-to-one meetings: organise unlimited one-to-one meetings even with the free plan.• Group video conferences: Organise up to 500 participants (if you purchase the "large meeting" add-on). The free plan, however, allows you to hold video conferences of up to 40 minutes and up to 100 participants.• Screen sharing: Meet individually or with large groups and share your screen with them so they can see what you see.• Recording: You can also record your meetings or events.	
EASE OF USE	No prior knowledge is required. Easy to use for all audiences
ACCESSIBILITY	Accessible to all
LANGUAGES	11 (Chinese (simplified and traditional) English French

	<p>German Italian Japanese Korean Portuguese Russian Spanish Vietnamese</p> <p>On Android and iOS clients, the Zoom language is determined by the default operating system language.</p>
<p>PRICING</p>	<ul style="list-style-type: none"> • Free zoom: this level is free of charge. You can hold an unlimited number of meetings. Group meetings with multiple participants are limited to 40 minutes in length and cannot be recorded. • Zoom Pro: this level costs \$14.99 / £11.99 per month and meeting host. It allows hosts to create personal meeting IDs for repeat Zoom meetings and allows recording of meetings in the cloud or on your device, but limits the duration of group meetings to 24 hours. • Zoom Business: this level costs \$19.99 / £15.99 per month and meeting host (10 minimum). It allows you to brand Zoom meetings with custom URLs and company branding, and offers cloud-recorded Zoom meeting transcripts as well as dedicated customer support. • Zoom Enterprise: This level costs \$19.99 / £15.99 per month per meeting host (100 minimum) and is intended for companies with more than 1000 employees. It offers unlimited cloud storage for recordings, a customer success manager and discounts on webinars and Zoom Rooms. • Optional - Zoom Rooms: If you want to set up Zoom Rooms, you can sign up for a free 30-day trial, after which Zoom Rooms requires an additional \$49/£39 per month and room subscription, while webinars using Zoom cost \$40/£32 per month and host.
<p>EXTRAS</p>	<p>It's worth it. There is a Zoom Outlook add-in that is designed to work directly in your Microsoft Outlook client or as an add-in for Outlook on the web. This Outlook add-in places a Zoom button directly on the</p>

	standard Outlook toolbar and allows you to start or schedule a Zoom meeting with a simple click.
PROS	
<ul style="list-style-type: none"> • As a video conferencing tool, it has an extremely stable connection support, which provides the possibility of making video conferences with a large number of people with high definition video quality and without cuts. • The desktop and mobile version has a user-friendly and intuitive interface. • It allows easy file sharing with the users present in a conference. • It offers the possibility of adding up to 1000 users to a single session, something that very few platforms are capable of allowing. • It has a free version that is not as restrictive as you might think. • It allows screen sharing, which is extremely useful for real-time explanations. • As it is an application with payment plans, it has specialised technical support. • Premium features are focused on business support, so it can be of great help for business plans of companies of any size. 	
CONS	
<ul style="list-style-type: none"> • Despite having a free version, the real functions of the application are reserved for the paid versions, which can be quite expensive. • Despite its current success, it is not as well known as other platforms such as Skype or Google Hangouts. • It is an application that works over the internet, so it is necessary to have a stable connection to have a video conference. • Despite having a fairly intuitive mode of use, it can be confusing for people who are not fully adapted to the use of computers or this type of technology. • The controversies it has caused in recent years, as well as the banning of its use in many countries, give important indications of the security risks involved in the use of Zoom. 	

NAME	Cisco Webex
BRIEF DESCRIPTION	Enables meetings anywhere in real time on the network, elaborate work on presentations, review documents, share any object or the

	<p>desktop, including applications, windows and directories of currently open files. At any time, you can grant privileges to attendees that allow them to annotate, save, print and display different views of shared documents or presentations.</p> <p>It is used for virtual meetings, remote or interactive sales, help desk and technical support, marketing and live events, virtual training and remote access.</p>
UTILITIES	
<p>Reliably delivers quality meetings, calls and team collaboration. Delivers outstanding user experiences while maximising the use of management and analysis tools. Keeps information secure and compliant, without sacrificing essential features. Take a step into the cloud, even if you have an in-house infrastructure.</p>	
EASE OF USE	No prior knowledge is required. Easy to use for all audiences
ACCESSIBILITY	Accessible to all
LANGUAGES	<p>21</p> <p>Chinese (simplified)</p> <p>Chinese (traditional)</p> <p>Danish</p> <p>Dutch</p> <p>English (US)</p> <p>English (UK)</p> <p>French (France)</p> <p>French (Canada)</p> <p>German</p> <p>Indonesian</p>

	<p>Italian</p> <p>Japanese</p> <p>Korean</p> <p>Norwegian</p> <p>Polish</p> <p>Portuguese (Brazil)</p> <p>Russian</p> <p>Spanish (Latin America)</p> <p>Spanish (Spain)</p> <p>Swedish</p> <p>Turkish</p>
<p>PRICING</p>	<p>Free Plan (0 euros per month):</p> <ul style="list-style-type: none"> • One host maximum • Meeting duration: 50 minutes. Up to 100 participants per meeting. • Full screen video with 4 distribution options. Screen sharing • Mobile screen sharing • Support for iPhone, iPad, Android and handheld devices. • Chat, notes, hand raising and polling • Save recordings to your computer • Breakout sessions • Online customer support • Virtual second planes • Unlimited group and direct messaging • Interactive whiteboard • HIPAA/BAA compliance • End-to-end encryption option • TLS 1.2 support • Meeting password entry required upon joining • Personal meeting room locking

	<p>Starter plan (12.85 euros per host, per month):</p> <ul style="list-style-type: none"> • 1-50 hosts • Meeting duration: Up to 24 hours • Participants per meeting: Up to 150 • Cloud storage for recordings: 5GB • Recordings in MP4 • Recording transcripts • Adding an alternate host • File transfer feature • Customer support via chat and inbound call • Control who is added to a slot • High definition VoIP • Encrypted recordings in the cloud <p>Professional Plan (25.65 euros per host, per month):</p> <ul style="list-style-type: none"> • 1-100 hosts • Meeting duration: Up to 24 hours • Participants per meeting: Up to 200 • Cloud storage for recordings: 10 GB • Chat, inbound calling and dedicated customer service representative available • Free call-in dial-in • FedRamp authorised • Includes access to Webex Events, Webex Training and Webex Support <p>Enterprise Plan (Customisable plans for companies that need other products, additional storage, larger meetings, webinars, breakout sessions and many more features).</p> <ul style="list-style-type: none"> • Customisable Hosts • Meeting duration: Up to 24 hours • Participants per meeting: Customisable • Cloud storage for recordings: Customisable. • Chat, inbound call-in and dedicated customer service representative available • Free call-in dial-in • FedRamp authorised • Includes access to Webex Events, Webex Training and Webex Support
EXTRAS	Add powerful collaboration features to your own applications. Webex APIs, SDKs and widgets are the easiest way for developers to integrate high-quality meetings, calls and team collaboration into any web or

	native application. Enhance workflows with integrations or bots and create your own integrations with Webex APIs. Cisco Webex App Hub connects Webex Teams spaces with popular third-party tools, integrations and bots.
PROS	
<ul style="list-style-type: none"> • Webex supports E-Meeting and E-Learning technologies. • It has unlimited connection time. • Webcam can be used to make the meeting more personal. • Any kind of software can be presented or shared. • You can remove or block access to unwanted users. • You can make corrections to documents and presentations within the meeting. 	
CONS	
<ul style="list-style-type: none"> • High cost • 10 users on the same site at the same time. More users incur an additional cost. • File transfer is slow. • Voice service is not optimal. • Modem connection is not sufficient. 	

NAME	Google Meet
BRIEF DESCRIPTION	Google Meet is a video telephony service developed by Google. It is one of two applications that make up the new version of Google Hangouts, the other being Google Chat.
UTILITIES	
Google Meet is primarily designed as a way to organise video meetings. However, you can enable the camera and microphone independently, so you can use it for audio calls if you wish.	
EASE TO USE	No prior knowledge is required. Easy to use for all audiences

ACCESSIBILITY	Accessible to all
LANGUAGES	6 Chinese English French Japanese Korean Spanish French.
PRICING	Free Plan: <ul style="list-style-type: none"> • Duration of meeting (1-1): 24 hours • Duration of meeting with more than 3 participants (maximum): 1 hour • Meeting participants: 100 • Number of meetings: unlimited • Invite external participants • Native mobile applications • Instant captioning • Share your screen and present • Adjustable layouts • Anti-misuse features • Encryption in transit and at rest • Two-step verification • Advanced Protection Program registration • Online help resources and community forums • 15GB of storage per user Google Workspace Essentials (\$8 per active user per month): <ul style="list-style-type: none"> • Meeting duration (1:1): 24 hours • Meeting duration of 3+ participants (maximum): 24 hours • Meeting participants (maximum): 150 • Number of meetings: Unlimited • Participate from a browser • Invite external participants • Native mobile applications • Instant captioning • Share your screen and present

	<ul style="list-style-type: none"> • Adjustable layouts • Dial-in numbers (countries where this access method is available) • Recording of meetings saved to Google Drive • Raise your hand • Polls and questions • Workgroups • Attendance reports • Anti-misuse features • Encryption in transit and at rest • Two-step verification • Advanced Protection Programme registration • Alert centre • Online help resources and community forums • Standard 24-hour support in multiple languages • Google Drive storage (100GB per user (up to 2TB total)) • Shared drives • File Stream from Drive Google Workspace Enterprise (Contact Sales for pricing): • 1:1 meeting duration (maximum): 24 hours • Meeting duration of 3+ participants (maximum): 24 hours • Meeting participants (maximum): 250 • Number of meetings: Unlimited • Participate from a browser • Invite external participants • Native mobile applications • Instant captioning • Share your screen and present • Adjustable layouts • Dial-in numbers (countries where this access method is available) • Recording of meetings saved to Google Drive • Raise your hand • Polls and questions • Working groups • Attendance reports
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	<ul style="list-style-type: none"> • Intelligent noise reduction • In-domain live broadcasts (100,000 viewers) • Anti-misuse features • Encryption in transit and at rest • Two-step verification • Advanced Protection Programme registration • Alert centre • Vault: store, archive and search data in Drive • Contextual access • Security dashboards • Security status • Investigation tool • Data Loss Prevention (DLP) for Drive • Connection Point Management • Data Regions • Access transparency • Online help resources and community forums • Standard 24-hour support in multiple languages • 24-hour priority support (1-hour response time target for critical issues) • Designated Google Advisor (1000 seats minimum) • Premium support with a technical account manager (purchase available) • Google Drive storage (unlimited) • Shared drives • File Stream from Drive
<p>EXTRAS</p>	<ul style="list-style-type: none"> • Guest access without G Suite via link. • Includes chat, virtual whiteboard, screen and file sharing. • Automatic captioning of conversations. • Integrated with Google Calendar and Gmail. • Call recording in Google Drive. • Audio via standard phone call with numbers in different countries. • Compatible with Skype for Business, SIP and H.323 hardware, including Polycom and Cisco.

PROS	
<ul style="list-style-type: none"> • Unlike other competitors, it offers the ability to create sessions of 100 or even 250 people. • As it is a paid service application, there is no need to worry about advertising during meetings. • Worldwide, it has more than 10 million downloads, which gives it enough prestige among business people and academics to be implemented. • It has the option to share screen with other members to view content such as slides, documents and other files. • It has a simple and practical interface, easy and deductive to use. • Since it is developed by Google, you can count on constant updates and improvements to enhance the experience of using this application. • In case you miss one of the video conferences, are unable to attend it completely or want to review the important aspects, it is possible to save the sessions. • The security of the video conferences is guaranteed thanks to the encryption of the transmissions. • Thanks to Google technology, it is able to provide real-time subtitles of the conversations. 	
CONS	
<ul style="list-style-type: none"> • It is a fully paid platform with affiliations to G Suite accounts, which limits its use to a large number of users. • It has few controls to regulate the speaking time of each participant, as well as to control the audio of the participants. • The session creator is required to have a G Suite account to start the video conference. • The number of people participating in each meeting will depend on the fee paid periodically to the application. 	

NAME	Skype
BRIEF DESCRIPTION	Skype is software that allows everyone to communicate. Millions of people and businesses already use Skype to make

	free individual and group video and voice calls, send instant messages and share files with other people using Skype.
UTILITIES	
Skype's main utility is to connect, free of charge over the Internet, different users of the application, no matter how far apart on the globe they may be.	
EASE TO USE	No prior knowledge is required. Easy to use for all audiences No prior knowledge is required. Easy to use for all audiences
ACCESSIBILITY	Accessible to all
LANGUAGES	<p>47</p> <p>Alemán Arabic Bulgarian Catalán Chino tradicional Chino (traditional, Hong Kong SAR) Croatian Czech Chino simplified Chino tradicional English (United States) Slovak Slovenian Español French (Canada) French (France) Alemán Estonian Finnish French Greek Hebrew Italian Japanese Indonesian English English (UK) Italian</p>

	<p>Japonés Latvian Portuguese (Portugal) Malay Dutch Ruso Polish Portuguese Portugués (Brasil) Español (España) Russian Serbian (Latin script) Español Swedish Thai Turkish Ukrainian Vietnamese</p>
<p>PRICING</p>	<p>Skype-to-Skype calls are free anywhere in the world. You can use Skype on your computer, mobile phone or tablet*. If you are both using Skype, the call is completely free.</p> <p>Users only have to pay to use premium features such as voicemail, SMS text messaging or make calls to landlines and mobiles outside of Skype.</p> <p>*Wi-Fi connection or a data plan for mobile devices is required.</p> <p>Skype-to-Skype calls are free, but to call a mobile or landline from Skype, you need some Skype Credit or a subscription.</p> <p>On their website, you can find the call prices depending on the country you want to call.</p>
<p>EXTRAS</p>	<p>However, Skype also has other functions for which a fee is charged:</p> <ul style="list-style-type: none"> • SkypeOut: calls from a Skype user to a landline or mobile phone anywhere. At the time of writing, in Spain, the rate is 2.1 cents per minute to landlines and 9 cents per minute to mobiles. • Skype SMS: SMS text messages sent by a Skype user to a mobile phone, for a fee that is currently 11.6 cents.

	<ul style="list-style-type: none"> • Voicemail: allows others to leave a voicemail message when the user is offline.
PROS	
<ul style="list-style-type: none"> • Skype is quick and easy to set up. • Free phone calls to other Skype users anywhere in the world. • Works with all firewalls, NAT and routers. Nothing to reconfigure. • Skype calls have high sound quality and are highly secure. • Skype works on most computers: Windows, Mac OS X, Linux and Pocket Out. 	
CONS	
<ul style="list-style-type: none"> • Unwanted contacts. • You have to pay to call landlines. • Voicemail is not free either. • Getting a virus when downloading by not getting it from the right page. • Sometimes there is bad sound and video resolution. 	

NAME	Gather.Town
BRIEF DESCRIPTION	It is a platform that fosters meaningful social interactions, enabling socialisation, collaborative and peer-to-peer work in a fun way, creating new digital experiences.
UTILITIES	
Interact with people, meet people and collaborate with them in a fun way.	
EASE TO USE	No prior knowledge is required. Easy to use for all audiences
ACCESSIBILITY	Accessible to all

LANGUAGES	English
PRICING	<p>Upgrade Plan for 2 hours:</p> <ul style="list-style-type: none"> • Town (\$1 per user): 10 basic objects, 3 advanced objects, email guest list, town moderator control. • City (\$2 per user): 50 basic objects, 10 advanced objects, email guest list, email domain access, city moderator control. • Metropolis (\$3 per user): Unlimited interactive objects, email guest list, email domain access, metropolis moderator control <p>Upgrade Plan for 8 hours:</p> <ul style="list-style-type: none"> • Town (\$2 per user): 10 basic objects, 3 advanced objects, email guest list, town moderator control. • City (\$4 per user): 50 basic objects, 10 advanced objects, email guest list, email domain access, city moderator control. • Metropolis (\$6 per user) : Unlimited interactive objects, email guest list, email domain access, metropolis moderator control. <p>Upgrade Plan for Daily:</p> <ul style="list-style-type: none"> • Town (\$3 per user): 10 basic objects, 3 advanced objects, email guest list, town moderator control. • City (\$6 per user): 50 basic objects, 10 advanced objects, email guest list, email domain access, city moderator control. • Metropolis (\$9 per user) : Unlimited interactive objects, email guest list, email domain access, metropolis moderator control. <p>Upgrade Plan for Monthly:</p> <ul style="list-style-type: none"> • Town (\$7 per user): 10 basic objects, 3 advanced objects, email guest list, town moderator control. • City (\$15 per user): 50 basic objects, 10 advanced objects, email guest list, email domain access, city moderator control.

	<ul style="list-style-type: none"> • Metropolis (\$22 per user) : Unlimited interactive objects, email guest list, email domain access, metropolis moderator control. <p>Custom Pricing: Are you hosting a space for your university, or a charity event that you think merits custom pricing? Contact us to start a discussion.</p> <ul style="list-style-type: none"> • Customizable Maps • Users (Free: Up to 25; Town: Up to 500) • Basic Interactive objects: images, External calls, videos. (Free: Unlimited; Town: 10) • Advanced Interactive Objects: Embed webpages, Synced TVs, Podium feature, Whiteboards, Poker Tables. (Free: Unlimited; Town: 3) • Email Guest list • Set password for space • Block/ban user by IP • Shut down a space • Add calendar events • Manage features • Spotlight users <p>There is also available an office demo.</p>
EXTRAS	<p>It works better if you use Google Chrome or Firefox. As in Safari Gather is still on beta, and you may experience audio and video issues. It's worth it</p>
PROS	
<ul style="list-style-type: none"> • You can see and hear those closest to you within the virtual space, and as you move around the map, you can see and hear others. • Gather.town has a great aesthetic that offers fully customisable maps, if you have the technical skills to build them. • When customising and working with maps on this platform, it is highly recommended to have an accessible graphic designer. • Gather.town allows for easy connection and natural conversation flows, as participants navigate to and from each area of the map. 	

- Private audio spaces are a unique feature of the meeting that make it functionally more useful for larger groups than other proximity tools.
- The new "Spotlight" (voice of God) feature is promising, but is a bug when it comes to screen sharing or presentation mode.
- There is a steep learning curve for many users in terms of navigating the space (arrow keys, no mouse interaction) especially since there is no zoom function.
- Gather.town is not an end-to-end platform. It cannot handle event registration or payments.
- If you want to organise a virtual event with less than 50 participants, we strongly recommend SpatialChat: it is much easier to set up and more intuitive for participants.

CONS

You have to pay

8.2. Tools For Gamification and Group Dynamization

This block includes and compares the most used virtual tools to carry out learning activities in a dynamic way, to capture the attention of the group or to work on group elements such as cohesion, dynamization, etc.

NAME	Kahoot
BRIEF DESCRIPTION	It is a very useful tool for teachers and students to learn and review concepts in an entertaining way, as if it were a quiz. The most common way is through multiple-choice questions, although there is also room for discussion and debate.
UTILITIES	
Kahoot! has been designed with educational purposes in mind, although it could very well be used simply for entertainment. The idea is the same as we've heard so many times before: learn while having fun.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All audiences
LANGUAGES	English and Spanish
PRINCING	<p>Basic Plan (Free):</p> <ul style="list-style-type: none"> • Use basic features to create, play and host learning games based on multiple-choice quiz. • Live in-class and video Kahoots • Self-paced challenges • Kahoots in class • Play ready-to-use Kahoots • Question bank • Create kahoots collections • Question importer • Multiple choice quiz • Images as answers • Slide • Teaching by videoconference • Reports for formative assessment • Nickname generator • Music options

	<ul style="list-style-type: none"> • Teacher groups • Number of teacher groups • Number of teacher group members - 8 • Community and social networking • Online support <p>Pro Plan (3\$ per teacher/ per month. Billed annually. Trial duration: 7 days. Cancel at any time):</p> <ul style="list-style-type: none"> • Teach interactive lessons with advanced slide layouts, diverse questions types and image options. • Live in-class and video Kahoots • Self-paced challenges • Kahoots in class • Play ready-to-use Kahoots • Question bank • Create kahoots collections • Question importer • Advanced slide templates • Slide importer • Multiple choice quiz • Images as answers • Slide • Multiple choice answers • Puzzle • Survey • Premium image library • Image Reveal • Video Conference teaching • Formative assessment reports • Interactive lessons • Nickname generator • Music options • Teacher groups • Number of teacher groups - 3 • Number of teacher group members - 20 • Community and social networking • Online support <p>Premium Plan (6\$ per teacher/ per month. Billed annually. Trial duration: 7 days. Cancel at any time):</p> <ul style="list-style-type: none"> • Customize kahoots with additional media formats, save time with integrations and maximize learning in any environment. • Live in-class and video Kahoots • Self-paced challenges
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	<ul style="list-style-type: none"> • Class-size Kahoots • School- and district-sized Kahoots • Personalised learning • Play ready-to-use kahoots • Question Bank • Create kahoot collections • Question importer • Advanced slide templates • Slide importer • Edit premium kahoots • Multiple choice quiz • Images as answers • Slide • Multiple choice answers • Puzzle • Survey • Premium image library • Image Reveal • Type your answer • Teaching by videoconference • Reports for formative assessment • Interactive lessons • Nickname generator • Music options • Teacher groups • Number of teacher groups - 10 • Number of teacher group members - 20 • Community and social networking • Online support <p>Premium+ Plan (Now there is an offer for 6\$ until June 30, but the normal price is 9\$ per teacher/ per month. Billed annually. Trial duration: 7 days. Cancel at any time):</p> <ul style="list-style-type: none"> • Live in-class and video Kahoots • Self-paced challenges • Class-size Kahoots • School- and district-sized Kahoots • Personalised learning • Ongoing challenges with no deadline • Play ready-to-use kahoots • Question Bank • Create kahoot collections
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	<ul style="list-style-type: none"> • Question importer • Advanced slide templates • Slide importer • Edit premium kahoots • Ready-to-use publisher kahoots (coming soon) • Multiple choice quiz • Images as answers • Slide • Multiple choice answers • Puzzle • Survey • Premium image library • Image Reveal • Type your answer • Navigate to previous questions • Teaching by videoconference • Reports for formative assessment • Interactive lessons • Lesson plans • Nickname generator • Music options • Teacher groups • Number of teacher groups - Unlimited • Number of teacher group members - Unlimited • Community and social network • Verified profile of Kahoot! Academy • Online support • Priority support • Pay by invoice • Engage children with the fundamentals of mathematics • Help children master addition and subtraction • Initiate and support learning to read • Give children a head start in algebra • Take algebra to the next level
EXTRAS	It is worth it
PROS	

- You involve your students in learning through play (motivation) and fix content in their memory through a playful experience.
- You get feedback from students in real time and you can use it to carry out other activities in the classroom or simply as a system of internal evaluation of the course.
- You collaborate in making the community of teachers bigger by extending the possibility to actively participate in the forum and exchange ideas and suggestions.
- Cooperation and exchange of knowledge. In addition, the fact that their results are reflected in the main menu for the whole class to see, encourages them to take more risks in learning.
- For all ages.
- For all subjects.
- For a variety of uses, it can be used for:
- Make an initial assessment of your students' knowledge: To find out their opinion and impressions of a particular subject or activity, Carry out group activities, and Encourage the participation of all students.

CONS

- You need an Internet connection and a mobile device.
- You need to dedicate a lot of time to its preparation and execution.

NAME	Edmodo
BRIEF DESCRIPTION	Edmodo is an educational network that aims to provide teachers with tools to help them connect and communicate with their students and their parents.
UTILITIES	
<p>Edmodo is a tool that aims to solve problems related to personal data and cyberbullying. In addition, and just as important, to provide teachers and educational institutions with tools that take advantage of the potential of the internet to educate young people.</p> <ul style="list-style-type: none"> • Create private groups with access limited to teachers, students and parents. • Provide a space for communication between the different roles by means of messages and alerts. • Manage the grades of our students. • Share various multimedia resources: files, links, videos, etc. 	

<ul style="list-style-type: none"> • Incorporate the contents of our blogs through syndication. • Launch student surveys. • Assign tasks to students and manage their grades. • Manage a class calendar. • Create communities where all the teachers and students of our educational centre can be grouped together. • Give parents access to the groups to which their children are assigned, allowing them to be informed of their children's activity and to have the possibility of communicating with the teachers. • Award badges to students as rewards for their participation in the group; possibility of creating evaluation questionnaires (under development). • Manage shared files and resources through the library. • Create subgroups to facilitate the management of working groups. • To have a public space where to show the activity of the group that the teacher considers appropriate. • Integration in the library of our contents in Google Drive. • Possibility of installing third-party applications that increase its functionality. • Preview of library documents. • Access via mobile devices (iPhone, Android). 	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Indonesian Danish German Russian English (British) English (US) Spanish Greek French Malay Italian Magyar Polish Portuguese (Brazil) Romanian Ukrainian Chinese Mandarin Japanese

	Turkish Indian Serbian Macedonian
PRICING	Free
EXTRAS	It is worth it
PROS	
<p>In addition to being an easy way for parents to keep track of their children's progress in class, Edmodo has a number of advantages for teachers and students.</p> <ul style="list-style-type: none"> • Gamification: Gamification in the classroom is integrated into Edmodo through badges, which are created by the teacher and awarded to students. Thus, he/she can give these "prizes" to the students depending on what he/she considers most appropriate (best work, best comment, greatest effort, etc.). • Security: Cybersecurity is one of the best things about Edmodo, as it is a secure network for parents, students and teachers. The data displayed on the platform is confidential. • Improved student interaction: Because it is set up as a social network, students are more inclined to learn. Thus, the platform implements and tracks usage patterns to see what works best. • Measure progress: Undoubtedly, one of the best advantages of Edmodo is that it facilitates the monitoring of the student in order to measure their progress. Any document, badge or grade that is sent through the platform is saved so that it can be consulted at any time. • Personalisation: Teachers will be able to expand the subject matter or add documents so that the student has access to a wider network of knowledge. Thus, if you have any doubts, you will have all the material in one place. • Free: In addition to offering all these advantages, Edmodo is a service that will not cost you a single euro. • Compatibility: It is currently compatible with the most popular operating systems (Windows, Mac OS, iOS, Android), so you can consult it from any computer, tablet or smartphone. 	
CONS	
<ul style="list-style-type: none"> • Students cannot communicate with each other directly by private message. 	

- It does not display users online.
- It is not possible to migrate the information posted on the wall of the groups.

NAME	Socrative
BRIEF DESCRIPTION	Socrative is a multimedia tool that allows you to create surveys and questionnaires by knowing the response of students in real time through both computers and mobile devices.
UTILITIES	
<p>Promote participation in class by integrating technology in the classroom: tablets, smartphones, laptops, etc.</p> <p>Evaluate students automatically, being able to access their answers quickly.</p> <p>Find out students' opinions by carrying out surveys on activities, tasks or assignments.</p>	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	<p>Free Plan:</p> <ul style="list-style-type: none"> • 50 students per room • 1 public room for your class • Launch 1 activity at a time • On-the-fly questioning • Space Race assessments <p>Socrative PRO for K-12 teachers plan (59,99\$ per year):</p> <ul style="list-style-type: none"> • Up to 20 private or public rooms • Launch up to 20 activities at once • Space Race countdown timer • Roster import via CSV or Excel
EXTRAS	It has different options that allow different data to be obtained in a simple way. The teacher creates a Quiz (questionnaire), Space Race (questionnaire with time) or Exit Ticket (questionnaire with ranking of results) and the students respond in real time through their devices. The teacher can follow the results live and review

	them later in the reports stored in Socrative. The questions asked in the application are multiple choice, true or false and short questions. This feedback can be essential to know the students' knowledge.
PROS	
<ul style="list-style-type: none"> • More variety in the types of questions. • Possibility of exporting questionnaires to PDF. • Easy-to-use interface for making lessons and answering lessons • Very attractive for the learner • Easy to pass data about grades, you can make reports that go to the teacher's email or download an Excel template. • The class is dynamic 	
CONS	
<ul style="list-style-type: none"> • It cannot be applied equally to all levels of education, because not everyone has easy access to this technology. • Cannot be used without internet • It is not recommended for use in primary and even lower secondary school grades. 	

NAME	Classcraft
BRIEF DESCRIPTION	Classcraft is a free online educational role-playing game in which teachers and students play together during class. Using many of the conventions traditionally found in modern games, students can level up, work in teams and gain powers that have real-world consequences. The game, which serves as a playful option in any course curriculum, transforms the learning experience in a fun way throughout the school year.
UTILITIES	
Classcraft is relevant to students because the risks and rewards in the game are real. Answer academic questions and help your teammates with their homework, and you can earn experience points that will unlock real powers like eating in class or asking a question on an exam.	

EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	<p>9</p> <p>Inglés US</p> <p>Francés</p> <p>Chino tradicional</p> <p>Alemán</p> <p>Español</p> <p>Catalán</p> <p>Ruso</p> <p>Holandés</p> <p>Húngaro</p>
PRINCING	<p>Free Plan:</p> <ul style="list-style-type: none"> • Gamified classroom management • Customisable characters • Features for parents <p>Premium Plan (120\$ per year):</p> <ul style="list-style-type: none"> • Gamified classroom management • Customisable characters • Features for parents • Gamified curriculum • Interactive classroom tools • Additional equipment and pets <p>School and district Plan (request a quote):</p> <ul style="list-style-type: none"> • Gamified classroom management • Customisable characters • Features for parents • Student analytics • Gamified curriculum • Interactive classroom tools • Additional equipment and mascots • School interface • Management analytics • Enhanced security • Live teacher training • Administrative support

EXTRAS	Classcraft offers educators a powerful set of tools while connecting real-life intervention with engagement data from existing content, platforms and systems.
PROS	
<ul style="list-style-type: none"> • The motivational nature of the gamified environment can be of great benefit in addressing our distance learning sessions and promoting student participation. • It can be linked to Google classroom and Microsoft classroom so we can generate linked tasks and use lists and learner profiles already created. • We can use sources and content from other platforms or digital media, e.g. YouTube, Google forms, images and videos from our drive, etc. • We can share the search maps (didactic sequences of activities and tasks) with other fellow teachers. In other words, we can use sequences already made in Classcraft by other professionals and adapt them to our needs. (Currently there are several physical education sequences but almost all of them are in English). • We can configure the tasks so that students are automatically given a progress score and we can later review the evidence. • The platform can be used as a drive for the students' evidence of work, we can review them without downloading them or at any time we can download them to our pc. It also leaves us organised by tasks, a list with the students who have handed in, those who handed in early, those who handed in late and those who have not handed in. • We receive notifications of students' actions and we can filter them by actions. • We can manage an asynchronous system, create a sequence of activities, make it visible, give it a due date and allow students to enter the platform at the time they want and work. 	
CONS	
<ul style="list-style-type: none"> • The number of students we serve on the platform as a physical education subject (and in any subject really) means that the large number of groups complicates direct and more personalised feedback and messaging with the students, as well as the review of all the evidence. Possibly the platform works best when we are dealing with a single group or smaller numbers of students. • Students or parents who are not familiar with digital environments and platforms may have problems with understanding the dynamics and game 	

interface, for example when creating a user using passwords or class keys or not understanding the mobile navigation of the platform.

- The maximum size of attachments allowed by the platform is 25 MB per task in the free version, so there is no problem with images or documents, but when uploading videos, students may have problems when attaching their files, especially if they do not know how to lower the quality of their videos when recording or if they make very long high quality videos.
- If we use the platform in asynchronous mode, as in our case, we always run the risk that the student or family member will be confident to do the task at some point and by not managing their time properly, they will not be able to complete the work.
- The configuration of the class can be complicated for the teacher if he/she does not have much experience with digital learning environments, in addition to the fact that it is a platform that was made in English and is just in the process of being completely translated into Spanish, so some functions can be complicated.
- We have to spend a lot of time as teachers to understand the platform and get the most out of it, we have to be willing to spend a few hours testing and watching tutorials to configure what we will do.

NAME	Trivinet
BRIEF DESCRIPTION	<p>It is a free online trivia game in which you have several ways to play.</p> <p>It is possible to play online without registering, in this mode we will only see questions in the language we select and on all subjects. We will be able to see our statistics as long as we do not leave the website.</p> <p>It is also possible to play trivia online for free as a registered user, with this option we can choose when to delete our statistics, if we want to receive an email with our statistics, the theme of the questions,...</p> <p>TriviNet is a tool created by a teacher with the idea of using this tool as a didactic resource that allows his students to learn by playing.</p>
UTILITIES	
	You have many possibilities to play trivia online for free, you can send your own questions, compete against the whole community of players, play only against your

friends, play only with questions of the theme of your choice,... And, most importantly, remember that you will always play trivia for free.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	8 Spanish French English Deutch Italian Catalán Euskera Portuguese
PRICING	Free
EXTRAS	Now you can download the trivinet online trivia mobile app for free. If the android app does not meet your expectations, the web is accessible from mobiles and tablets, so by using the browsers of your devices you can access and play from them.
PROS	
It already has a multitude of pre-loaded questions by subject areas, subjects and educational levels. You can create a game with the questions that others have shared and that are already in the system and, in addition, upload the ones that interest you. I think it's great!	
CONS	
Is just a trivia	

NAME	QuiverVision
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BRIEF DESCRIPTION	It is an app that converts drawing patterns into augmented reality. It offers an engaging and interesting experience for all ages.
UTILITIES	
Quiver is an app specialising in the development of augmented reality, making it easier for flat models to come to life and for the user to interact with them.	
EASE TO USE	Requires teacher training. But it can be use by any student (from the youngest to the oldest)
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	Free
EXTRAS	You can interact with the model and there are even quizzes that test your knowledge of the subject matter of the drawing.
PROS	
<ul style="list-style-type: none"> • Easy to use. • It can be run from a mobile phone, and is available for iOS and Android. • Encourages meaningful learning as it places the student in a real situation. • It generates augmented reality models with a click. • Improves motivation for learning. • Helps students to understand. • Provides a positive attitude. • Improves satisfaction. • Improves confidence. • Improves spatial skills. • Increases interest. • Provides opportunities for collaboration between students. • Facilitates student-teacher communication. • Promotes self-learning. • Combines the physical and virtual world. • Allows students to learn by doing. • Student-centred use of technology. • Allows multi-sensory learning. • Allows information to be received quickly. • Encourages interaction: student-student, material-student, student-teacher. 	

<ul style="list-style-type: none"> • Allows visualisation of invisible concepts, events and abstract concepts. • It is easy to use. • Reduces expenditure on laboratory materials. • Opens up new opportunities in a wide variety of contexts. • Increases spatial reasoning.
CONS
<ul style="list-style-type: none"> • It takes time. • Requires teacher training. • Not suitable for teaching large groups. • Technical problems - camera, Internet, indoor use. • Cognitive overload. • Distracts students' attention. • Expensive technology. • Difficult design. • Teachers need to improve their ability to use technology. • Digital divide, there are still people who do not have access to this type of technology.

NAME	Mentimeter
BRIEF DESCRIPTION	Mentimeter is a simple system for creating surveys, which allows users to create them in just a few minutes, free of charge and without the need for registration.
UTILITIES	
MENTIMETER is a digital resource that allows you to create interactive presentations by adding questions, quizzes, questionnaires, slides, images, etc. Thanks to the use of smartphones, the audience can connect to the presentation where they can answer questions, provide comments in real time.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Catalan Chinese (simplified and traditional) Croatian Czech

	<p>Danish Dutch English Finnish French German Hindi Hungarian Icelandic Indonesian Italian Japanese Lithuanian Norwegian Polish Portuguese Portuguese- Brazil Punjabi-India Romanian Russian Slovenian Spanish Swedish Tamil Turkish Ukrainian Welsh</p>
<p>PRICING</p>	<p>Free (\$0): Unlimited audience size. Unlimited presentations. Data may be anonymized and used for inspiration.</p> <p>Basic (\$9,99/ month): Get Unlimited questions per presentations, export and total ownership of your data.</p> <p>Pro (\$24,99/ month): Everything Unlimited! Customize your presentations with your brand and logotype.</p>

EXTRAS	
PROS	
It's a brilliant app because it can turn a boring, long, and tedious presentation into one that's engaging, enjoyable, and upbeat.	
CONS	
The fact that the app takes a long time to display poll results to viewers at times	

8.3. Tools For Document and Presentation Production

This block includes and compares the most commonly used virtual tools for producing documents and presentations, including the design and production of infographics and other visual elements.

NAME	H5P
BRIEF DESCRIPTION	H5P is a free and open source collaborative content framework based on Javascript. H5P is an abbreviation for HTML5 Package, which aims to facilitate the creation, participation and reuse of interactive content in HTML 5.
UTILITIES	

H5p allows for around 35 different types of interactive content:

- Agamotto or Interactive Image Sequence
- Audios
- Voice quizzes
- Dictations
- Essays
- Virtual tour
- Interactive video

EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English and Spanish
PRICING	Free
EXTRAS	it is worth it

PROS

- Makes the creation of e-learning content more democratic, as no technical knowledge is required.
- Although the return on investment (ROI) of developing e-learning courses is high, quantitatively and qualitatively, there are some institutions that cannot afford such an investment in the short term, and H5P can help them get started with interactive content creation without making a major investment.

CONS

- While it could be seen as a disadvantage that the degree of customisation of the interactions produced by default is limited, further graphical and functional customisation is possible at the code level.
- A further "disadvantage" is that it does not support SCORM, ... but it does support xAPI.

<ul style="list-style-type: none"> • Create high quality designs for presentations such as murals, personal presentations, etc. • Use infographics to summarise what has been learnt in class in a visual way. It allows you to acquire the global perspective of the subject being dealt with. • Learn to organise visual content in a small space. 	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	<p>Free Plan:</p> <ul style="list-style-type: none"> • Up to 5 active visuals • Access all templates • Access image and illustration library • 40MB of storage for uploading images • Export images in standard quality • Piktochart watermark <p>Pro Plan (\$24,17 per month billed annually saves 17% OR \$29 billed monthly): All in FREE plus:</p> <ul style="list-style-type: none"> • Create unlimited images • 1GB of storage for uploading images • HD image export • Watermark removal • Export your visuals in PDF format • Export presentations to PowerPoint • Protect your published visuals with passwords • Create and use your own colour schemes • Upload and use your own fonts • Organise your visuals in folders <p>Team Plan (\$16,50 per seat per month (for 5 seats) billed annually saves 17% or \$99 billed monthly): All in FREE and PRO plus:</p> <ul style="list-style-type: none"> • 5 team members included • 1GB/user storage for uploading images • Secure login with SAML Single Sign-On • Create custom templates for your team • Share your project with team members • Leave comments on your team's images • Set roles and permissions •

EXTRAS	<i>Worth it</i>
PROS	
<ul style="list-style-type: none"> • Generate infographics, presentations and print for free. • Tool with pre-designed templates. • Extensive gallery of photos, icons and frames. • Free download of your file in .PNG image format. • Allows you to share your designed files over the Internet. 	
CONS	
<p>The disadvantage is that the Piktochart Pro version is required to be able to customise the templates offered and to have access to a larger number of templates, although it is not essential to purchase it.</p>	

8.4. Tools For The Development Of Participatory Processes

This section includes and compares the most commonly used virtual tools for questionnaires, surveys, calendars and other types of participatory data and information gathering processes.

NAME	Padlet
BRIEF DESCRIPTION	Padlet is a digital platform that offers the possibility of creating collaborative walls. In the school environment, it works as a virtual collaborative whiteboard where teacher and students can work at the same time.
UTILITIES	
<ul style="list-style-type: none"> • Create a wall of common values and rules for the classroom, encouraging companionship and collaboration. • Collect audio-visual material on a specific topic with a greater theoretical load on which you want to go deeper. • Review activities: the wall will serve as a place to go to review study content. • Possibility of creating a reading club in the classroom, where students can post their critiques and literary recommendations. • Multimedia noticeboard, where news and ideas for new projects can be shared. 	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English and Spanish
PRICING	Free Plan School Plan (2.000 euros per school per year. Includes 500 teacher and student accounts).

	<p>Padlet Briefcase (Business Plan) (If you pay month-to month- \$12 per user/ month. If you pay year-to-year, \$99 per user/ year. The annual plan, therefore, is 31% cheaper than the month-to-month plan.</p> <p>Padlet Pro (from 8 euros per month):</p> <ul style="list-style-type: none"> • Limited Padlets • 250 MB files • Priority assistance • Domain Assignment • Folders
EXTRAS	<i>Worth it</i>
PROS	
This programme has enormous advantages, such as: its simplicity, its capacity to be shared, the possibility of including different elements, it is free, it has a pleasant interface...	
CONS	
As for its disadvantages in the classroom, we could summarise them in one: it needs to be recorded.	

NAME	Doodle
BRIEF DESCRIPTION	It is an online survey tool that is very useful for consensus on a place, day or location.
UTILITIES	
It is very simple to use and is designed to be able to propose events and submit them to the vote of the participants through the network. Guests receive a link in their mailbox and this directs them to a page where they can view the specific details and choose the option they are most interested in, which is registered on the website.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users

<p>LANGUAGES</p>	<p>Spanish American English British English German French Italian</p>
<p>PRICING</p>	<p>Free Plan Pro Plan (\$6,95 per month/ 1 user):</p> <ul style="list-style-type: none"> • No announcements • Synchronise meetings with calendars • Deadlines and reminders • Request email, phone or address • Zapier integration • Zoom integration • Integration with Microsoft Teams • Outlook integration • Doodle Bot for Slack • Bookable Calendar • Custom logo and branding • Custom scheduling URL • Doodle 1-on-1 meetings <p>Team Plan (\$44,75 per month- 5 users/ \$89,50 per month-10 users/ \$179,00 per month 20 users):</p> <ul style="list-style-type: none"> • No announcements • Synchronise meetings with calendars • Deadlines and reminders • Request email, phone or address • Zapier integration • Zoom integration • Integration with Microsoft Teams • Outlook integration • Doodle Bot for Slack • Bookable Calendar • Custom logo and branding • Custom scheduling URL • Doodle 1-on-1 meetings • Multi-user management <p>Enterprise Plan (A customised environment for organisations that require greater personalisation, control and attendance):</p> <ul style="list-style-type: none"> • Customised legal and payment terms

	<ul style="list-style-type: none"> • Dedicated success manager • 99.5% SLA availability • Priority support • Guaranteed response time • Dedicated onboarding and user training • Single sign-on (SSO)
EXTRAS	<i>worth it</i>
PROS	
<ul style="list-style-type: none"> • Very easy to use. Setting up a mini-survey is a matter of minutes. • No need for your friends to have the app installed. • TIME SAVING • CAN BE USED EVERYWHERE: You can send the invitation or proposal by whatsapp, facebook, email...etc • Integrates with your Google calendar to identify conflicts • Can be used on both mobile devices and PC (no installation required) 	
CONS	
<ul style="list-style-type: none"> • Surveys are stored on the provider's server and are only suitable for date setting or for small or private surveys. • Surveys created in the free version are not encrypted. 	

NAME	Google Forms
BRIEF DESCRIPTION	It is a free, web-based tool that allows you to collect information easily and efficiently.
UTILITIES	
Google Forms allows you to plan events, send a survey, ask your students questions or collect other types of information easily and efficiently. You can create a form from Drive or from an existing spreadsheet. One of the tools in Google Docs is Google Forms.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users

LANGUAGES	149 Languages
PRICING	<p>Free Plan</p> <p>Business Starter Plan (4,68 euros as an offer, normally 5,20 euros per user per month):</p> <ul style="list-style-type: none"> • Personalised and secure business email • Video calls with up to 100 participants • 30 GB cloud storage per user • Security and management controls • Standard support <p>Business Standard Plan (9,36 euros as an offer, normally 10,40 euros per user per month):</p> <ul style="list-style-type: none"> • Personalised and secure business email • Video calls with up to 150 participants and video recording • 2 TB of cloud storage per user • Security and management controls • Standard support (enhanced paid support available for purchase) <p>Business Plus Plan (15,60 euros per user per month):</p> <ul style="list-style-type: none"> • Personalised and secure business email with eDiscovery and data retention • Video calls for up to 250 participants, video recording and attendance recording • 5 TB of cloud storage per user • Enhanced security and management controls, including Vault and advanced hotspot management • Standard support (paid enhanced support available for purchase) <p>Enterprise Plan (Contact Sales for prices):</p> <ul style="list-style-type: none"> • Personalised, secure business email with eDiscovery, data retention and S/MIME encryption • Video calls with up to 250 participants, video recording, attendance logging, noise reduction and in-domain live broadcasting • As much space as you need • Advanced security, management and compliance controls, including Vault, DLP, data regions and enterprise hotspot management • Enhanced support (paid premium support available for purchase)

EXTRAS	<i>Worth it</i>
PROS	
<ul style="list-style-type: none"> • It is a free tool, all you have to do is create a Gmail account. • You can create and edit documents, spreadsheets and presentations online. • You can share and collaborate with other users in real time. Several users can be working at the same time, while this tool will manage the changes and avoid collisions. It also allows you to see who has made what changes and to revert them if necessary. • It stores the work in the Gmail emails of each of the collaborators so that it is available to everyone. • We can create word, excel, power point and pdf documents. • It offers possibilities to create useful forms to collect information, for example in surveys or subscriptions and also personalised graphics. 	
CONS	
<ul style="list-style-type: none"> • You must have internet access to be able to work. • There are certain limitations regarding the capacities that the tool accepts depending on the format of the document: for texts, up to 500 Kb; images, up to 2 Mb; and for spreadsheets up to 256 cells or 40 sheets. • Its handling may not be secure if the user does not create a good password and protect it, or if the user makes a mistake trying to share files with his group, and makes them accessible to other people 	

NAME	SurveyMonkey
BRIEF DESCRIPTION	SurveyMonkey is a platform that allows you to collect opinions and transform them into people-powered data.
UTILITIES	
Easily create surveys, quizzes and polls for any audience. ... Leverage your insights to make better data-driven decisions.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users

<p>LANGUAGES</p>	<p>Spanish Portuguese German Dutch French Russian Italian Dansk Svenka Chinese Mandarin Japanese Turkish Norsk Suomi</p>
<p>PRICING</p>	<p>Individual plans Premier anual (99 euros per month a total of 1.118 euros per year):</p> <ul style="list-style-type: none"> • Unlimited number of surveys • Unlimited questions per survey • 7,500 responses per month • 24/7 English email and telephone support • Email support in Spanish • Tests with personalised feedback • Custom logo, colours, survey URL • Data export • Opt-out logic, question and answer channelling • Text analysis and statistical significance • Advanced data exports (SPSS) • A/B testing, randomised distribution, quotas • Payment acceptance • File uploading • SurveyMonkey Industry Benchmarks • Click map data visualisation • Multilingual surveys • Cross tabulations • Unlimited filtering and comparison parameters, data trending • Advanced branching and funnelling, random block distribution • Neutral branded surveys

	<p>Advanced Annual (36 euros per month a total of 432 euros per year):</p> <ul style="list-style-type: none"> • Unlimited number of surveys • Unlimited questions per survey • 5,000 responses per month • 24/7 English email support • Email support in Spanish • Tests with personalised feedback • Custom logo, colours, survey URL • Data export • Opt-out logic, question and answer channelling • Text analysis and statistical significance • Advanced data exports (SPSS) • A/B testing, randomised distribution, quotas • Payment acceptance • File uploading • SurveyMonkey Industry Benchmarks <p>Standard Monthly Plan (39 euros per month)</p> <ul style="list-style-type: none"> • Unlimited number of surveys • Unlimited questions per survey • 1,00 responses per month • 24/7 English email support • Email support in Spanish • Tests with personalised feedback • Custom logo, colours, survey URL • Data export • Opt-out logic, question and answer channelling • Text analysis and statistical significance <p>Team Plan</p> <p>Advanced Team Plan (30 euros per user per month. It starts with 3 users. Annual payment):</p> <ul style="list-style-type: none"> • Survey sharing option with fine-grained control over who can view and edit • Receive all comments in one place • Allow your team members to analyse, filter and export results • Notify others when you receive new responses • Sharing library to customise surveys with your branding Add partner vacancies • Add or reassign accounts at any time • Free integrations with popular collaboration applications Unlimited surveys and questions • Fast 24/7 email support
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	<ul style="list-style-type: none"> • Tests with personalised feedback • Customised logo, colours and survey URL • Page and question opt-out logic • Data exports in all formats (CSV, PDF, PPT, SPSS, XLS) • Payment acceptance • Advanced analysis features • SurveyMonkey Industry Benchmarks • Multilingual surveys <p>Premier Team Plan (75 euros per user per month. It starts with 3 users):</p> <ul style="list-style-type: none"> • Survey sharing option with fine-grained control over who can view and edit • Receive all comments in one place • Allow your team members to analyse, filter and export results • Notify others when you receive new responses • Sharing library to customise surveys with your branding Add partner vacancies • Add or reassign accounts at any time • Free integrations with popular collaboration applications Unlimited surveys and questions • Fast 24/7 email support • Tests with personalised feedback • Customised logo, colours and survey URL • Page and question opt-out logic • Data exports in all formats (CSV, PDF, PPT, SPSS, XLS) • Payment acceptance • Advanced analysis features • SurveyMonkey Industry Benchmarks • Multilingual surveys • Cross tabulations • Unlimited filtering and comparison parameters, data trending • Advanced survey logic tools • Block randomisation • Neutrally branded surveys • Redirection on survey completion • Eliminate SurveyMonkey footer • Create private applications with direct API access
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	<p>Enterprise Plan (Powerful management tools, integrations and collaboration features for your organisation):</p> <ul style="list-style-type: none"> • Survey sharing option with fine-grained control over who can view and edit • Receive all comments in one place • Allow your team members to analyse, filter and export results • Notify others when you receive new response • Sharing library to customise surveys with your branding Add partner vacancies • Add or reassign accounts at any time • Free integrations with popular collaboration applications Unlimited surveys and questions • Fast 24/7 email support • Tests with personalised feedback • Customised logo, colours and survey URL • Page and question opt-out logic • Data exports in all formats (CSV, PDF, PPT, SPSS, XLS) • Payment acceptance • Advanced analysis features • SurveyMonkey Industry Benchmarks • Multilingual surveys • Cross tabulations • Unlimited filtering and comparison parameters, data trending • Advanced survey logic tools • Block randomisation • Neutrally branded surveys • Redirection on survey completion • Eliminate SurveyMonkey footer • Create private applications with direct API access • Types of flexible multi-user plans • HIPAA-compliant features** • Brand customisation • Salesforce, Marketo, Eloqua and Tableau** integrations • Administrator control panel and user management • Account control and migration • Enhanced control and security features • Single sign-on (SSO) • Activity tracking through audit trails
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	<ul style="list-style-type: none"> Engaged customer success manager
EXTRAS	<i>Worth it</i>
PROS	
<ul style="list-style-type: none"> The use of the tool is very simple, as it has several links that help navigation within the tool. You only need to know basic English vocabulary. It reduces costs for the interviewer, as the survey is not printed. The interviewer designs the interview by adding backgrounds, colours and positions to suit his/her needs, which personalises the interview. The questions can be reordered in a simple way, after the questionnaire has been elaborated, facilitating the re-structuring and design of the survey. It indicates through the use of the re-jumper who has answered the survey, which makes it easier to locate the people who have not yet filled it in. It does not take up space on your hard drive, making it available anytime, anywhere. 	
CONS	
<ul style="list-style-type: none"> Although this application is free and basic, it does not provide the user with access to all the possibilities of the tool, such as: filtering data, exporting data to another tool such as Excel, not being able to edit the logo of the institution, not being able to make logical jumps, etc. The basic subscription has the characteristic that the interviewee can leave questions unanswered, which can be detrimental to subsequent analyses. The basic subscription has the characteristic that the interviewee can leave questions unanswered, which can be detrimental to further analysis. If the appropriate option is not chosen, the survey is not anonymous. 	

NAME	Google Calendar
BRIEF DESCRIPTION	The Google Calendar tool is an automatically synchronised electronic diary-calendar that helps students and teachers to organise time and events.

UTILITIES	
<ul style="list-style-type: none"> • Organise activities, events and tasks with a large group of people. • Collaboration between all users participating in the calendar to agree on dates for exams or meetings, as well as reminders of events to them. • Promote school events by publishing a specific calendar that is available to everyone. You can share it with both students and parents. 	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	149 languages
PRICING	Free
EXTRAS	<i>worth it</i>
PROS	
<ul style="list-style-type: none"> • Google quality, easy to use, on-line, free, infinite calendars... • Accessible online, Web 2.0 technology, sharing calendars Sending appointment reminders to your mobile phone! • They do not require any hardware or software and, moreover, only minimal maintenance is required. This saves companies a lot of time and costs. 	
CONS	
<ul style="list-style-type: none"> • Interface a bit ugly 	

8.5. Visual Narrative Tools

This block includes and compares the most widely used virtual tools for carrying out audiovisual processes, whether in video or audio format.

NAME	ThingLink
BRIEF DESCRIPTION	It is an interactive software, based in Helsinki, whose main function is to create attractive content, enabling journalists, educators, bloggers, etc., to add links of all kinds - videos, music, photos, web pages, etc. - to enrich any kind of graphic material they work on.
UTILITIES	
Project creation, students can use ThingLink's 360° image editor to easily make virtual tours or 360° documentaries, along with audio narration, images, videos and written evidence, allowing students to engage like never before."	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	<p>Free Version</p> <p>Marketing and editorial plans:</p> <ul style="list-style-type: none"> • Professional Individual (\$25 per month): Unlock the ability of a single content creator to publish interactive media across the web. Includes: ALL FUNCTIONS FREE OF CHARGE AND, IN ADDITION: Publish unlimited images, Publish unlimited videos, Branding removal, Participation analysis, Share privately and publicly, 75 000 views/year, 1 author. • Premium Team (\$125 per month): Our most powerful and popular licence. Build extensive 360-degree virtual tours. Designed for small to medium sized teams. Includes: ALL PROFESSIONAL FUNCTIONS AND, IN ADDITION: Publish unlimited 360 images, 750 000 views/year, 3 authors, Collaboration and shared folders, Offline desktop viewing and Account representative and training session. • Enterprise: Built to fit your needs. Get customised view packages, best for large teams, integrations and advanced support. Includes: ALL PREMIUM FEATURES PLUS:

	<p>360° video and 3D object annotation, Customised view packages, Customised assistance packages, Virtual tour design and production, Global teams, Multiple properties, Resell ThingLink and Native advertising.</p> <p>Academic Institution Plans:</p> <ul style="list-style-type: none"> • Professional Teacher for the Classroom (From \$35 /year): Suitable for individual teachers working with 1 or 2 classrooms. Easily create and share engaging and accessible learning materials, or engage students in creative collaboration. Helps students document their learning and develop new digital skills. Includes: ALL FREE FEATURES, PLUS: Unlimited image publishing, Starts with 60 students, \$2 per additional student, Collaborative editing, ThingLink logo removal, Microsoft Teams integration, 12,000 views per year, and Engagement Analytics • Premium Academic License for Schools (Price per user seat: \$2 per year-Minimum order of 400-500 seats): Ideal for schools with multiple teachers using ThingLink. Increased security with verified school account setup and integration with existing infrastructure and tools. Allows multiple teachers to collaborate and work with the same groups of students. Includes: INCLUDES ALL PREMIUM FEATURES AND: Organisation Profile, Offline View, Premium Training and Support, Microsoft Office 365 and Google Logins, SAML Single Sign-on support. • Enterprise Academic License (Price per user seat: \$9 per year): ALL STANDARD FEATURES, PLUS: 360 video and 3D object annotation, Qualitative learning data collection, Embeddable interactive content modules, Data collection in the LMS, Training for account representatives and teachers, Cloud services integration, and Course development and production service options. <p>Training and workforce development plans for the company's workforce:</p> <ul style="list-style-type: none"> • eLearning Free: Explore all the features of ThingLink in private mode. Include: Full access to the ThingLink editor, Image and 360° image editing, Video and 360° video editing, Style customisation and No advertisements. • eLearning Premium (\$4 user per month): Create and publish engaging and immersive training materials and
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	<p>share them in the LMS. Ideal for teams and SMEs. Include: Image, video, 360°/VR image publishing, Secure sharing, Minimum 25 users, Engagement statistics, Offline view, Microsoft Office 365 and Google logins, Microsoft Teams integration, and Service Desk</p> <ul style="list-style-type: none"> • eLearning Enterprise (\$8 per month): Suitable for in-house training and scenario-based learning with advanced learning analytics. Use cases: Any training requiring enterprise-level security features, remote training to operate in technical environments or service situations. Includes: INCLUDES ALL PREMIUM FEATURES AND: Edit & publish: Images, videos, 360° images, 360° videos &, 3D-objects, Branching scenarios, Content views: Unlimited, Engagement statistics, Learning analytics, 10TB data plan for video viewing, Min. 100 seats, Access to learning design, production and training experts, and OS support and LMS integration (LTI). <p>Thinglink for Non-Profit Organizations: NPOs can save 50% (\$750 value) on a ThingLink Premium account forever using coupon NPOSAVE at checkout. Click the link below and select Premium to redeem the coupon and start creating.</p>
EXTRAS	
PROS	
<ul style="list-style-type: none"> • Fully interactive. • Fairly simple interface • Easy to keep everything in one place. • Accepts documents, photos, videos, links, audio. • Customisable. • Can be shared on the network. • Asynchronous. • Creation of timelines. • Free if you subscribe as a teacher. 	
CONS	
<p>It is available in English only and can only be used with prior registration.</p>	

NAME	Storyform
BRIEF DESCRIPTION	Storyform is a perfect tool for creating multimedia stories. It works with a system of slides - similar to PowerPoint but with a much nicer design - that allow you to combine text, high quality images and video.
UTILITIES	
Creating multimedia stories	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	Free and Premium (\$) version
EXTRAS	
PROS	
Producing original multimedia presentations like never seen before	
CONS	
Some of the templates, fonts... are chargeable.	

NAME	Readymag
BRIEF DESCRIPTION	An in-browser graphics editor that enables you to create websites, portfolios, presentations, editorials, landing pages, and online shops in hours.
UTILITIES	
It is a solution that helps to build websites without programming, selecting templates, choosing page numbers of our digital magazine, altering formatting, including widgets, putting colours and texts, defining columns, uploading photos...	

EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Spanish, English and Russian
PRICING	<p>Free Version (\$0): Try out our features on your way to something bigger. Includes:</p> <ul style="list-style-type: none"> • 1 Published project at a time • Unlimited draft projects • 10 Pages per project • 1 Collaborator <p>Creator Version (\$16 per month, \$192 per year). Includes:</p> <ul style="list-style-type: none"> • Unlimited projects • Unlimited pages • Unlimited domains • 5 Collaborators • 25k project views/mo • Private projects • Google Analytics • GTM • Forms • E-commerce • Domain mapping • Custom fonts upload • Advanced SEO • PDF export • Transfer projects • Limited Code injection • Limited Shots widget <p>Custom Version (Starts at \$384 per year). Includes:</p> <ul style="list-style-type: none"> • Unlimited projects • Unlimited pages • Unlimited domains • Custom team size • Custom project views/mo • Private projects • Google Analytics • GTM

	<ul style="list-style-type: none"> • Forms • E-commerce • Domain mapping • Custom fonts upload • Advanced SEO • PDF export • Transfer projects • + extras of your choice: • Sharing settings • Code injection • Code export <p>Professional Version (\$64 per month, \$768 per year).</p> <p>Includes:</p> <ul style="list-style-type: none"> • Unlimited projects • Unlimited pages • Unlimited domains • 10 Collaborators • 50k project views/mo • Private projects • Google Analytics • GTM • Forms • E-commerce • Domain mapping • Custom fonts upload • Advanced SEO • PDF export • Transfer projects • Sharing settings • Code injection • Code export • Shots widget • Form file upload • Priority support
EXTRAS	
PROS	

- Setting up the site is easy for those who don't want to code.
- Everything is quick to set up and publish.
- Drag and drop tools give you a lot of control over the design.
- The templates and interface make it easy to create a site that is simple or complex.
- Responsiveness is a must.
- Small customisations are nice, such as a custom URL even with the free plan.
- Current magazine? sites can see many benefits from the ability to publish multiple issues and list them on the home page.
- Widgets are easy to use and integrate common tools such as text, forms, images, video, audio, slideshows, Twitter and Facebook, iFrame and Google Maps.
- The templates are easy to use and a good starting point.
- Readymag's paid plans are affordable and offer excellent features for users who will use this tool as their dominant web platform.

CONS

- The interface is a bit difficult to use at first.
- The site uses some terminology that you might have to think about (magazines, covers, etc.) if you are not used to publishing terms.
- The template options are somewhat limited.
- This tool is best suited for magazine style portfolio content or writing/photography and can be difficult to use with other types of information.

NAME	Sutori
BRIEF DESCRIPTION	Sutori is a collaborative instruction and presentation tool for the classroom
UTILITIES	
Sutori is a collaborative instruction and presentation tool for the classroom	

EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English and Spanish
PRICING	<p>FOR EDUCATION:</p> <p>Sutori Essential (Free). Includes:</p> <ul style="list-style-type: none"> • Create stories • Add text & images • Share & collaborate • Presentation mode • Embed Sutori into other websites • Student management <p>Sutori Unlimited (\$99 / year / educator. Unlimited number of students all upgraded). Includes: All Sutori Essential features plus:</p> <ul style="list-style-type: none"> • Add videos • Add quizzes • Add audio • Add any file • Bulk upload of media • Add headings • Add links • Added customization • Leave feedback • Class discussions • Story analytics • Use templates • Google Drive integration <p>Sutori for departments (Upgrade 6 educators in one go to Sutori Unlimited. \$500 per year)</p> <p>Sutori for Schools (School-wide licence for unlimited use. Includes LTI integration. \$2,000 per year)</p> <p>FOR BUSINESS:</p> <p>Sutori Essential (Free). Includes: Basic story creation</p> <ul style="list-style-type: none"> • Create & embed stories

	<ul style="list-style-type: none"> • Add text & images • Collaboration • Sutori branding • 1,000 embed views per month <p>Sutori Pro (\$399 per year). Includes: Unlimited unbranded stories</p> <ul style="list-style-type: none"> • Embed all web media • Add headings • Add audio • Add video • Add any file • Bulk upload of media • Add quizzes • Add comments • Story analytics • Removal of Sutori branding for all stories • Use templates • Added customization • 50,000 embed views per month
EXTRAS	
PROS	
<ul style="list-style-type: none"> • It is completely free of charge. • Easy to use without extensive knowledge. • Accessible from any browser. • Timelines can be shared with other users. • It has a section for education. 	
CONS	
<ul style="list-style-type: none"> • User registration is required. 	

8.6. Cartographic and Temporal Narrative Tools

This block includes and compares the most commonly used virtual tools for cartographic and temporal narrative processes such as interactive maps or timelines.

NAME	Google Maps
BRIEF DESCRIPTION	Google Maps is Google's free web-based mapping service. It offers scrollable map images, as well as satellite photos of the entire world and cities, and even the route between different locations with route detail specification.
UTILITIES	
Like other map services, Google Maps allows the creation of steps to get to an address. This allows the user to create a step-by-step list of how to get to their destination, calculating the time needed and the distance travelled between locations.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Afrikaans, Albanian, Amharic, Armenian, Azerbaijani, Bosnian, Burmese, Croatian, Czech, Danish, Estonian, Filipino, Finnish, Georgian, Hebrew, Icelandic, Indonesian, Kazakh, Khmer, Kyrgyz, Lao, Latvian, Lithuanian, Macedonian, Malay, Mongolian, Norwegian, Persian, Romanian, Serbian, Slovak,

	Slovenian, Swahili, Swedish, Turkish, Ukrainian, Uzbek, Vietnamese and Zulu.
PRICING	Free
EXTRAS	
PROS	
<ul style="list-style-type: none"> • Very easy to use. • Offers the ability to zoom in and out to display the map. • It offers a lot of additional information about most of the places in the world. • It shows us routes to get to different places from our situation. • We can print, send or link the maps. 	
CONS	
<ul style="list-style-type: none"> • It requires a mandatory Internet connection. • Google Street View is not yet complete, as it only offers a few cities. 	

NAME	Map Hub
BRIEF DESCRIPTION	MapHub is a site that allows you to create customised maps with routes or different types of images and then share them embedded in your website.
UTILITIES	
<p>MapHub allows you to create interactive maps. You can easily make your own map by adding points, lines, polygons, or labels</p>	
EASE OF USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Spanish and English
PRICING	Free
EXTRAS	
PROS	

<ul style="list-style-type: none"> • The map has different bases to choose from • Easy to use • In your first creation it is explained to you step by step • Free • Allows you to set routes and tells you exactly the distance • Different formats for downloading the image
CONS
Depending on what you want to use it for, its content may be limited.

NAME	Carto
BRIEF DESCRIPTION	Carto is a geospatial positioning tool that works in two directions. On the one hand, it is a huge geospatial database. On the other, it is a visualisation tool for this data, making your work easier and allowing you to create beautiful dynamic maps.
UTILITIES	
	<ul style="list-style-type: none"> • Data visualisation • Dynamic maps • Geospatial tool
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	<p>Free Version (\$0): For everyone who wants to try CARTO for 12 months. Includes:</p> <ul style="list-style-type: none"> • 150 MB of memory • Up to 3 private maps • Up to 3 public maps • 20,000 map loads per month • Up to 10 datasets

	<ul style="list-style-type: none"> • Public API only <p>Individual Version (\$199 per month): For individuals and freelancers. Includes:</p> <ul style="list-style-type: none"> • 500MB memory • Unlimited private maps • Up to 10 public maps • 50,000 map loads per month • Up to 40 datasets • Limited API access • Basic support <p>Enterprise Version: For team and organizations. Includes:</p> <ul style="list-style-type: none"> • Flexible memory tiers • Advanced data connectors • Unlimited private maps • Unlimited public maps • Unlimited datasets • Full API access • Enterprise support packages • Available on the cloud or on-premises • Access to our Data Observatory (more info available in our Spatial Data Catalog)
EXTRAS	
PROS	
<ul style="list-style-type: none"> • Availability • Reduced costs • More efficient use of data • User-friendly and intuitive • Improved competitiveness, productivity and collaboration • New business markets 	
CONS	

- Cost
- Access to data
- Functionality
- Storage
- Control and security

8.7. Tools For Data Visualisation and Organisation

This block includes and compares the most commonly used virtual tools for visualising, organising and facilitating the interpretation of data through graphs, diagrams, schemes, etc.

NAME	Flourish
BRIEF DESCRIPTION	Beautiful and easy data visualization and storytelling
UTILITIES	
Create databases, graphs of all types, timelines...	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	<p>Public (Free):</p> <ul style="list-style-type: none"> • All data and projects public • Share or embed projects • Create stories and presentations • Mobile and tablet friendly <p>Personal (\$69 per month): Everything in Public plus:</p> <ul style="list-style-type: none"> • Keep your data and projects private • Share, embed or self-host with attribution • Email support <p>Business Lite (from \$4,999 per year): Everything in personal plus:</p> <ul style="list-style-type: none"> • Multiple users in team • Custom theme with Google font • Password-protected publishing • Priority support <p>Business and Enterprise (Contact the enterprise): Packages can include: Premium templates and features</p> <ul style="list-style-type: none"> • Bespoke themes in your fonts/styles

	<ul style="list-style-type: none"> • Code-free scrollytelling in your CMS • Connect to live CSV or Google Sheets • SDK for private custom templates • API for integration anywhere • MSA and support/uptime SLA • Account manager and training plans • Access Experts Network developers • SAML-based SSO
EXTRAS	
PROS	
	It gives you the option of making digital publications, where interactivity and compatibility are essential. In addition, complex data can be manipulated in a simple way.
CONS	
	The main problem is that in order to have more privacy in the work you are doing, you must use the paid version, as the free model for authors works with an open logic, where the contents must be public

NAME	Online Chart Tool
BRIEF DESCRIPTION	Create charts of all types.
UTILITIES	
	Creation of charts
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English, French, Ukrainian, Spanish, German, Russian and Dutch

PRICING	Free
EXTRAS	
PROS	
<i>Everything from bar charts to pyramid charts to bubble charts and area charts can be graphed.</i>	
CONS	
privacy at risk, data manipulation, unreliable information, illegal downloads	

NAME	ChartGo
BRIEF DESCRIPTION	ChartGo is a simple and intuitive online application for creating line, pie, surface and histogram charts (2D and 3D).
UTILITIES	
One of its most convenient features is that it enables the capture of data from any spreadsheet, allowing the creation of graphs almost immediately.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Spanish and English
PRICING	Free
EXTRAS	
PROS	
ChartGo offers customisation operations and four types of charts. It allows you to customise colours, dimensions, font style and mention a data font.	

CONS
It offers only four types of graphs: bar, line, area and pie charts. A bit basic

NAME	Creately
BRIEF DESCRIPTION	Creately is an award-winning diagramming tool, renowned for its ease of use. Its clean interface combined with unique features such as one-click create and connect help you draw diagrams up to 3 times faster compared to traditional diagramming software.
UTILITIES	
Creately is an online canvas. It offers individuals and teams a digital workspace to plan, brainstorm, design and analyse their ideas, processes, systems, strategies, etc., using a variety of formats: diagramming, writing, whiteboarding, visualisation and even video conferencing.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Spanish and English
PRICING	<p>Basic (0 euros):</p> <ul style="list-style-type: none"> • Documents -3 • Folders -1 • Number of forms -Limited • Collaboration -Basic • Import/Export- Limited <p>Personal (from 4.30 euros per month):</p> <ul style="list-style-type: none"> • Documents- unlimited • Folders- unlimited • Number of forms- unlimited • Collaboration -Basic • Import/Export- Everything • Support- E-mail <p>Team (from 5 euros per month per user):</p> <ul style="list-style-type: none"> • Documents- unlimited • Folders- unlimited • Number of forms- unlimited • Collaboration -Advanced • Import/Export- Everything

	<ul style="list-style-type: none"> • Support- Priority • Equipment management- Basic <p>Corporate (from 13 euros per month per user):</p> <ul style="list-style-type: none"> • Documents- unlimited • Folders- unlimited • Number of forms- unlimited • Collaboration -Advanced • Import/Export- Everything • Support- Priority • Equipment management- Advanced • SSO/SCIM- yes • Customer success- yes
EXTRAS	
PROS	
	<ul style="list-style-type: none"> • The program runs perfectly in any browser and is very complete. • It has enough tools to achieve completely professional results. • It is a free tool, it emerges as a very effective option to do this kind of work.
CONS	
	<ul style="list-style-type: none"> • Loss of information • No copyright

NAME	Plotly
BRIEF DESCRIPTION	Plot.ly is a web tool for data analysis and visualisation. Based in Montreal, Plot.ly provides people with online graphics, statistics and analysis tools, as well as scientific graphics libraries for Python, MATLAB, among others.
UTILITIES	

With Plot.ly you can create different varieties of graphs from data you have somewhere, you can also create line, dot and bar graphs. Also histograms and so-called heat maps.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English
PRICING	For the price, you have to fill in a form on their website and they will give you a quote tailored to your needs. (https://plotly.com/get-pricing/)
EXTRAS	
PROS	
<ul style="list-style-type: none"> • <i>Analyse and create two graphs at the same time.</i> • <i>A dozen different graphs to build</i> • <i>Customisable templates</i> • <i>Professional look and feel (tables and graphs)</i> 	
CONS	
It costs money	

NAME	Raw Graphics
BRIEF DESCRIPTION	Raw Graphics, a tool for creating visualisations of complex data. Raw Graphs is an open-source application created as a joint project of Density Design Lab, to create interactive graphics based on complex information.
UTILITIES	
Creation of graphics and visualization data	
EASE TO USE	No prior knowledge is required for its use. Easy to use

ACCESSIBILITY	All users
LANGUAGES	English
PRICING	Free
EXTRAS	
PROS	
<ul style="list-style-type: none"> • Very comprehensive information • Allows all types of parameters to be varied • Highest image quality without compression 	
CONS	
<ul style="list-style-type: none"> • Much larger file size • Need for post-processing • Each brand uses its own format 	

8.8. Tools For Web Creation

This block includes and compares the most widely used virtual tools for creating web spaces.

NAME	Wix
BRIEF DESCRIPTION	Wix.com is a cloud-based web development platform that was developed and popularised by the company Wix.
UTILITIES	
It allows users to create HTML5 websites and mobile sites through the use of online drag-and-drop tools.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	English, Spanish, Portuguese, French, German, Polish, Italian, Russian, Japanese, Korean, Turkish, Chinese, Thai, Dutch, Swedish, Norwegian, Danish, Hindi and Czech.
PRICING	<p>WEBSITE PLANS</p> <p>Free Version</p> <p>VIP Version (24,50 euros per month):</p> <ul style="list-style-type: none"> • Custom domain name • Free domain for 1 year • Remove Wix ads • Free SSL certificate • Unlimited bandwidth • Storage space: 35 GB • Hours of video: 5 hours

	<ul style="list-style-type: none"> ● 75 in advertising coupons ● Site Booster App ● Free for 1 year ● Visitor Analytics App ● Free for 1 year ● Professional Logo ● Logo files for social networks ● Customer support <p>Unlimited (12,50 euros per month):</p> <ul style="list-style-type: none"> ● Custom domain name ● Free domain for 1 year ● Remove Wix ads ● Free SSL certificate ● Unlimited bandwidth ● Storage space: 10 GB ● Hours of video: 1 hour ● 75 in advertising coupons ● Site Booster App ● Free for 1 year ● Visitor Analytics App ● Free for 1 year ● Customer support <p>Combo (8,50 euros per month):</p> <ul style="list-style-type: none"> ● Custom domain name ● Free domain for 1 year ● Remove Wix ads ● Free SSL certificate ● Bandwidth: 2 GB ● Storage space: 3GB ● Video Hours: 30 Minutes ● 75 in advertising coupons ● Customer support <p>Connecting domains 4,50 euros per month):</p> <ul style="list-style-type: none"> ● Custom domain name ● Free SSL certificate ● Bandwidth: 1 GB ● Storage space: 500 MB ● Customer support <p>BUSINESS AND E-COMMERCE PLANS</p> <p>Business VIP (35 euros per month):</p> <ul style="list-style-type: none"> ● Plans and recurring payments ● Customer accounts ● Personalised domain
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	<ul style="list-style-type: none"> ● Free domain for 1 year ● Remove Wix ads ● Unlimited bandwidth ● 50 GB storage space ● Unlimited video hours ● 75 in advertising coupons ● Customised reports ● Customer support <p>Business Unlimited (25 euros per month):</p> <ul style="list-style-type: none"> ● Plans and recurring payments ● Customer accounts ● Personalised domain ● Free domain for 1 year ● Remove Wix ads ● Unlimited bandwidth ● Storage space 35 GB ● Hours of video: 10 hours ● 75 in advertising coupons ● Customer support <p>Business Basic (17 euros per month):</p> <ul style="list-style-type: none"> ● Plans and recurring payments ● Customer accounts ● Personalised domain ● Free domain for 1 year ● Remove Wix ads ● Unlimited bandwidth ● Storage space 20 GB ● Hours of video: 5 hours ● 75 in advertising coupons ● Customer support
EXTRAS	
PROS	
<ul style="list-style-type: none"> ● The incredibly intuitive builder is among the best in the industry. ● The free account option allows users to create and host beautiful websites at no cost. 	

- Wix, offers more than 510 templates with high quality professional designs, which can serve any purpose, that is.
- Wix offers you templates whose varied designs can be easily adjusted to the object of your business.
- You don't need to know how to code or program to design a custom website, because its interactive tools will make your work easier.
- It provides interactive drag-and-drop tools, which will facilitate the design of your website.
- It offers you the possibility to edit your images easily with its retouching and editing tools.
- Offers easy to use design features, including: insert text, insert videos, insert multiple sections.
- They make monthly updates, which is beneficial because it ensures they stay on the cutting edge.
- It provides technical support by phone, and help buttons that will support you when you need it.
- The Wix app marketplace integrates with many popular web services, allowing live support, newsletter, contests, booking tools and testimonials on your site.
- The new Artificial Design Intelligence (ADI) creates complete sites from scratch in minutes based on your needs, using semantic information from similar sites on the web.
- Recently, Wix has introduced advanced e-commerce tools, including: setting up shipping costs based on price range and product destination, tracking unfinished orders, and more.
- The Wix web builder supports HTML which allows users with programming skills to create code to further customise their website.

CONS

- Too much design freedom, which can be overwhelming for some people, due to the amount of options and changes Wix allows you to make when customising your website.
- No way to view site statistics unless you pay to have the ability to add Google Analytics.
- Limited E-commerce options, however, the platform is constantly being updated to include advanced options for your online shop.
- You must be sure of your template selection, because once your website is designed, if you want to change your template, you will lose all the uploaded content. For these reasons, I recommend that you make sure your design suits your business needs.

- The free Wix package brings with it the presence of banner ads, although it is very common in many of the web creators, in Wix they have a very prominent size.

NAME	Wordpress
BRIEF DESCRIPTION	WordPress is a content management system (CMS) that allows you to create and maintain a blog or other type of website. ... If you write content frequently, when someone accesses the website, they can find all the content in chronological order (most recent first, oldest last).
UTILITIES	
It allows you to create websites and their contents in a visual way, without having to program.	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	More than 100 languages
PRICING	<p>Free Plan</p> <p>Personal Plan (if you pay monthly 7 euros, if you pay annually 4 euros):</p> <ul style="list-style-type: none"> • The best hosting available • Remove WordPress.com ads • Receive payments • Unlimited email support <p>Premium Plan (if you pay monthly 14 euros, if you pay annually 8 euros):</p> <ul style="list-style-type: none"> • The best hosting available • Remove WordPress.com ads • Receive payments • Unlimited email support • Earn advertising revenue • Premium Themes • Upload videos • Integration with Google Analytics <p>Business Plan (if you pay monthly 33 euros, if you pay annually 25 euros):</p> <ul style="list-style-type: none"> • The best hosting available

	<ul style="list-style-type: none"> ● Remove WordPress.com ads ● Receive payments ● Unlimited email support ● Earn advertising revenue ● Premium Themes ● Upload videos ● Integration with Google Analytics ● Install plugins and extend your website's functionality with access to over 50,000 WordPress plugins ● Advanced SEO (Search Engine Optimisation) tools ● Automated backups and one-click restores ● SFTP (SSH File Transfer Protocol) and database access <p>eCommerce Plan (if you pay monthly 59 euros, if you pay annually 45 euros):</p> <ul style="list-style-type: none"> ● The best hosting available ● Remove WordPress.com ads ● Receive payments ● Unlimited email support ● Earn advertising revenue ● Premium Themes ● Upload videos ● Integration with Google Analytics ● Install plugins and extend your website's functionality with access to over 50,000 WordPress plugins ● Advanced SEO (Search Engine Optimisation) tools ● Automated backups and one-click restores ● SFTP (SSH File Transfer Protocol) and database access ● Payment methods accepted in over 60 countries ● Integrations with all major carriers ● Premium design options for online shops
EXTRAS	If you pay annually you will enjoy live chat support on any of the plans.
PROS	
<ul style="list-style-type: none"> ● Open source ● Free ● Easy installation ● Easy initial configuration ● Easy installation of Themes ● Easy administration ● Improve your SEO Ranking ● Easy hosting migration 	

<ul style="list-style-type: none"> • HTTPS Compatible • Business booster • Never stops
CONS
<ul style="list-style-type: none"> • Excessive resource consumption • Low speed • It is the most attacked CMS • Unstable plugins • Sometimes it is necessary to know programming • Advances very fast

NAME	Site123
BRIEF DESCRIPTION	SITE123 is the most intuitive and user-friendly website builder on the market. We handle everything from website structures to design to make sure you focus only on your content.
UTILITIES	
Website creator	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users

LANGUAGES	<p>French German Italian Arabic Greek Hebrew Portuguese Russian Ukrainian Spanish Turkish Romanian Hungarian Croatian Serbian Bosnian</p>
PRICING	<p>Free Version (\$0):</p> <ul style="list-style-type: none"> • 250 MB of storage • 250 MB bandwidth • Subdomain <p>Premium Version (\$12.80 per month):</p> <ul style="list-style-type: none"> • Free domain for 1 year • 10 GB storage • 5GB bandwidth • Remove SITE123 floating tag • Connect your domain • E-commerce
EXTRAS	
PROS	
<ul style="list-style-type: none"> • No previous experience is required. That's right, you don't need to be a programmer or hire one, as Site123 offers a really intuitive interface for any beginner. • All of its templates are free of charge. Site123 has more than 180 templates, which you can install completely free of charge. • Ideal for online businesses. To access the best options such as unlimited product samples, online payments, among others. You need to purchase a plan, but it is definitely a worthwhile investment. 	

CONS
<ul style="list-style-type: none"> • One of the big disadvantages is that its free functions are very basic, in case you want to create an online shop or customise your website, you will have to invest some money, so you will realise that it is not really a free service. However, this is very common with any other web developer. • Another disadvantage that can be mentioned is that you cannot download your website, you cannot customise it beyond the functions that the templates allow and if for some reason you want to import your website to another developer such as WordPress, this is not possible.

NAME	Joomla!
BRIEF DESCRIPTION	Joomla! is a content management system that allows you to develop dynamic and interactive websites.
UTILITIES	
Allows you to easily create, modify or delete content on a website through an "administration panel".	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Joomla! allows you to easily create a multilingual website, without the need to install any third party extensions. In this tutorial, you will find a complete guide to the steps needed to create a Joomla! site with support for multiple languages.
PRICING	Free
EXTRAS	
PROS	
<ul style="list-style-type: none"> • It is free and open source software: you can use it as many times as you want, and modify its code as you need. 	

- The way to install Joomla is easy and fast, step by step through a web wizard.
- Thousands of plugins and components are available, 100% free to extend the functioning of your website.
- There are hundreds of templates/themes to install and change the look of your website.
- Can be used to create blogs, personal, institutional or corporate websites.
- It allows the installation of plugins and commercial - paid templates in a natural way.
- It is very useful for setting up e-commerce shops.
- It is constantly updated, it is a solid project with a great future.
- It allows the use of widgets, menus and content blocks in an easy and fast way, dragging and dropping.
- It has a powerful admin panel from where you can manage content, pages, articles, etc.
- There is extensive documentation on Joomla, its extensions, themes and bug fixes.
- It is supported by a large community always ready to help you with any problem you may have.
- Through the use of SEO modules it allows you to make your site Google friendly.
- It can be used by novices as well as experts, even people who don't know programming or web development.
- Its learning curve is relatively easy, as the interfaces are super intuitive, neat and polished to maximize the user experience.
- It allows the registration and administration of users in private areas.
- It can be used perfectly to process online payments with credit and debit cards, which is necessary in e-commerce and online shops.
- Supports SSL certificates (HTTPS) to keep your Joomla secure at all times, migrating Joomla to HTTPS is easy.
- It works on any type of web server such as Apache, Nginx, LiteSpeed, etc.
- Its performance can be greatly accelerated by using modules and Cache configurations.

CONS

- If your goal is to create a professional blog, it is not the best, for that the ideal is WordPress. Joomla lacks all the tools, modules and themes to set up a professional blog, with comments, reputations, advanced

tags, etc. If you need a basic blog, it works, but not for something more advanced.

- Although there are templates and plugins, it is not as extensive a repository as other CMS, you may have to resort to a programmer to do something you need or integrations with other platforms.
- The admin panel is intuitive but overloaded with options, which tends to confuse some users and reduces its ease of use.
- The level of SEO optimisation is good, but not as advanced as you will get with WordPress.
- Due to its popularity it is one of the most attacked CMS. There are systems that are not as attacked and just as good as Drupal.

NAME	Webnode
BRIEF DESCRIPTION	Webnode is a wonderful web page builder because of its ease of use.
UTILITIES	
Create web pages in a very simple way	
EASE TO USE	No prior knowledge is required for its use. Easy to use
ACCESSIBILITY	All users
LANGUAGES	Catalan, Chinese Simplified, Chinese Traditional, Czech, English, French, German, Greek, Italian, Polish, Portuguese, Slovak, Spanish, Turkish, Simplified Chinese, Spanish, Czech, Simplified Chinese, Portuguese, Slovak, Turkish
PRICING	<p>Free: With a Webnode ad. Without domain and with 100 MB webspace.</p> <p>Limited 3€: Connect your own domain. Contains a small Webnode ad in the footer.</p> <p>Mini 5,50€: Good solution for small projects. Still has a footer ad.</p> <p>Standard 9,90 euros: Ideal for larger sites and multilingual pages.</p> <p>Professional 17,90 euros: For large sites needing up to 5 GB of space and 100 email accounts.</p>

EXTRAS	Prices per month on a one year contract. Domain name from 9,90€ per year. Prices vary according to domain extension (e.g. .es, .com, etc.).
PROS	
<ul style="list-style-type: none"> • <i>Highly recommended for multilingual websites</i> • <i>Good search engine optimisation (SEO)</i> • <i>Good functions for creating and restoring backup copies</i> 	
CONS	
<ul style="list-style-type: none"> • Few advanced features • Very basic blog • Limited eCommerce options 	

9. CONCLUSIONS

In this research, we looked at several initiatives and educational programs aimed at closing the digital skills gap and equipping young people with the abilities they need to succeed and thrive in the digital economy.

The projects we've chosen and discussed in this document are regarded as best practices since they've proven to be inventive, long-lasting, and impactful, as well as demonstrating some common aspects that led to their success.

One of the primary points we want to emphasize is the necessity of forming multi-stakeholder partnerships, or joint ventures, in which government agencies, business, and civil society organizations collaborate, and which are motivated by the idea that the private sector can supplement and support the services usually provided by the public sector.

We believed it would be acceptable to present some suggestions and recommendations to be considered and planned while considering and preparing an educational program in the field of digital skills and competencies, as the major goal of this paper is to inspire and guide stakeholders to repeat or scale up such efforts.

Operational recommendations can be given to the major players engaged in the development of educational programs, particularly when multi-stakeholder partnerships are being considered, such as representatives from industry and civil

society on the one hand, and teachers and other education professionals on the other.

Given that these are typically the primary individuals involved in the creation and implementation of government-industry partnerships, it is critical that they consider practical advice and ideas that aid in the achievement of short-term goals, with the goal of improving and supporting the correct development and success of these programs.

Strategic recommendations, on the other hand, should be developed with a focus on achieving long-term goals. In this regard, it is critical to reach out to policymakers at the national and European levels, develop action plans, and support broad methods that can help achieve the aim of expanding the number of young people with digital skills.

Between these two tiers of measures, **tactical recommendations** that are focused on short and medium-term objectives must be established. These are primarily aimed at national, regional, and local policymakers, as well as facilitators or organizations that can coordinate government-industry educational programs (e.g., National and Local Coalitions, employers' organizations).

To effectively reach the primary players involved in multi-stakeholder partnerships and to match the national strategic objectives with the (primarily local) operational activities, it is critical to work at the regional and local levels.

10. acknowledgments

11. ANNEX: EXISTING PRACTICES ON VIRTUAL LEARNING MOBILITIES AND ERASMUS+ PROJECTS ON DIGITALIZATION IN PARTNERSHIP COUNTRIES

11.1. Belgium

Name of the project/good practice	Training and Evaluation Cycle for European Solidarity Corps Volunteers (pre-departure, on- arrival, mid-term evaluation, final evaluation)
Implemented by	JINT vzw, Flemish NA Erasmus+ Youth
Description of the project/good practice	<p>TEC was fully online as of March 2020 till July 2021 in the Flemish part of Belgium. Members of the NA trainers pool have developed methodology and programme flow for the online TEC in March 2020. All TEC trainings are run via Zoom, using other additional tools like jamboard, mentimeter, facebook groups.</p> <ul style="list-style-type: none"> • Pre-departure training online has duration of 3 hours; • On-arrival training has duration of 5 days, 2,5-3 hours per day, normally is facilitated by 2 trainers; <p>Programme flow includes: getting to know each other, team-building activities, presentation of the volunteering projects, Learning in European Solidarity Corps and Youthpass, Intercultural learning, Meet and Greet NA representatives, open space, planning the future, energizers and evaluation sessions;</p> <ul style="list-style-type: none"> • Mid-term evaluation has duration of 3 days, 2,5-3 hours per day, normally is facilitated by 2 trainers; <p>Programme flow includes: reconnecting, My European Solidarity Volunteering project up till now, Q&A for NA, Youthpass, planning the next steps, energisers, evaluation.</p>

	All TEC training are highly appreciated and evaluated by the volunteers though in their evaluations majority are mentioning that they hope that will be able to meet up for activities all together residentially.
Additional links and Resources	https://www.europeansolidaritycorps.be/
Name of the project/good practice	"Creation of Cities/Regions of Learning and Learning pathways/playlists of outdoor escape rooms" as one of the Intellectual Outputs of the project "Art Escape"
Implemented by	CODEC vzw in partnership with Badgecraft Ireland, System and G, Greece, Plan Be, Cyprus, JumpinHub Portugal, Hyvarila Finland.
Description of the project/good practice	<p>"Art Escape" project aims to enhance skills development and competences of youth workers in creation and managing outdoor escape rooms with thematic on traditional fairy tales and myths, that reinforce creativity, as well as to boost quality, innovation and recognition of youth work that support the creative potential of youth, thus contributing to the recovery resilience of the cultural and creative sectors.</p> <p>In Intellectual output number 3 of this project we will launch 4 platforms in Belgium, Greece, Finland and Portugal (In Cyprus the platform is already launched). Design, test and implement learning pathways for 5 selected outdoor escape rooms created.\$</p> <p>Cities and Regions of Learning use the latest digital technology to map learning opportunities, offer local and digital experiences combined into playlists, and use digital Open Badges to value and recognise learning and achievements. Any city or region can become a partner and get access to a territory-based web platform that enables the creation of unique learning pathways using the following features:</p> <ul style="list-style-type: none"> • Interactive map for learners and organisations to easily navigate through the learning pathways in your territory searching and filtering learning opportunities;

	<ul style="list-style-type: none">● Learning playlists created by local partners by combining local and digital activities organised into thematic learning pathways;● Digital open badges for learners and organisations to record, verify and showcase experiences, skills and achievements in a visual and secure way.
Additional links and Resources	www.citiesoflearning.eu

Name of the project/good practice	#developtogether
Implemented by	CODEC vzw in partnership with partner organizations from Italy, Poland, Portugal, Turkey, Georgia, Armenia, Moldova, Belarus
Description of the project/good practice	<p>#Developtogether aims to raise the professionalization of youth work by supporting youth organizations to develop competences to recognize, train and validate top skills of NEET that are most relevant for employability, better social integration on both national and European levels. The project develops structured actions towards socio-professional development of youth workers and trainers, developing new forms of practical training schemes, new forms of youth work, open educational resources, exploitation of ICT potential and develop an educative innovative pathway for boosting employability potential of NEET;</p> <p>One of the intellectual outcome to be produced is Learning diary mobile app version: The information collected by the app is primarily intended to monitor the learning process of NEET and the competences they acquire. At the same time, for the learner, the application will be a tool facilitating reflection on their own learning process, and will allow them to realistically assess the level / quality of key competences acquired. Both the mentor and the learner will be informed which competences are still areas of development, and which the learner mastered enough to be able to use them later or transfer them freely. App will also allow analyzing the achievements of the learner, transparency of the process of reaching competences, fast transfer of photos, documenting their learning and will be a significant facilitation when it comes to fulfilling the Youthpass or any other national instrument(s) of learning validation.</p>
Additional links and Resources	https://www.facebook.com/KA-2-Developtogether-100171684910457

11.2. Italy

Name of the project/good practice	Migrant Liter@cies – innovative practices in the teaching of literacy with use of ICT and digital literacy to migrant adults
Implemented by	SOCIETA' COOPERATIVA SOCIALE ZAFFIRIA
Description of the project/good practice	<p>The most relevant priority of Migrant Liter@cies was the research and development of innovative practices in the use of ICT in the effective teaching of Literacy to migrant adults (refugees, newly arrived migrants, asylum seekers, young adult migrants and migrant women), by testing and implementing innovative practices in the field, using participatory approaches and through the development of guidelines that are usable and useful on a European Scale. One of the main objectives of this project is the analyzing of best practices and methodologies of adult migrant literacy programs in the countries of the partnership and the development of innovative practices, including the creative use of ICT for language learning, using for example mobile devices and social media: APPs, Whatsapp, videogames, etc.</p> <p>Outcomes: The Migrant Liter@cies MOOC is a course aimed at educators working with adult migrants, as well as at institutions able to implement training activities for teachers and teaching staff: Universities, Centers of Research and Training, Adult Education Centers, Networks of Associations working with Migrants, national and European organizations.</p> <p>Workshops In the second year of the project 45 workshops have been developed and experimented in the countries of the partnership.</p> <p>Learning, Teaching, and Training Activities</p>

	<p>The project had 2 Transnational, Teaching and Training Activities. The experiences and expertise of the partners as well as the representatives of the teaching institutions, contributed to an enhanced quality in the elaboration of didactical plans for the teacher training and the development of evaluation strategies.</p> <p>National Toolkits</p> <p>The 8 National <i>Migrant Liter@cies</i> Toolkits were drafted based on the ideas and suggestions emerged during the LTT Activities and thanks to the 44 experimental workshops made by all partners.</p>
Additional links and Resources	<p>https://www.migrantliteracies.eu</p>

Name of the project/good practice	Hacking Education through eLearning and Open Education
Implemented by	POLITECNICO DI TORINO
Description of the project/good practice	<p>- Improving the digital skills and competences of higher education teaching staff in developing and delivering content for distance courses, with attention to open education approaches, thanks to the creation of an open and innovative capacity-building program.</p> <p>- Promoting the creation of teachers' groups from different backgrounds and of other professionals (media-production experts, quality-assurance professionals, web developers, etc.) to share and combine work and to strengthen trans-disciplinary collaboration in the field of digital education.</p> <p>- Creating a network of institutions interested to experiment with new teaching approaches and spread them in their own context, enlarging the potential benefits, and promoting a virtuous circle.</p> <p>- Creating a support network that enabled teachers and institutions to freely and collaboratively explore the co-creation of digital content, greatly enhancing their confidence in the ability to create.</p> <p>The main outputs from EduHack</p> <ol style="list-style-type: none"> 1. Practical & reusable resources for the practitioners <ul style="list-style-type: none"> o EduHack online course o Webinar 1: Introducción a las competencias digitales o Webinar 2: Competencias digitales aplicadas o Webinar 3: Ideas innovadoras para el EduHackaton 1/2 o Webinar 4: Ideas innovadoras para el EduHackaton 2/2 o EduHack Toolbox o EduHack Domain Kits 2. Research material bringing forward the reflection in the sector <ul style="list-style-type: none"> o Paper (EDEN 2018) o Paper (Cinedumedia 2018) 3. Community building tools <ul style="list-style-type: none"> o EduHack Wall o EduHackathon blogging platforms o EduHack Community Hub

Additional links
and Resources

<https://eduhack.eu/>

Name of the project/good practice	TalentLab - Transform my school
Implemented by	Ecole du Dialogue
Description of the project/good practice	<p>Most 20th century schools are structured to train students to follow hierarchical orders and guidance on performing repetitive tasks, often alone, sometimes in competition with other students.</p> <p>21st-century schools should rather focus and initiate a systemic transition enabling more: • entrepreneurship, • peer learning, • equity and inclusion, • digital competences, • multilingualism, while improving the sustainability (reducing costs) of the schools. Being a teacher in these two kinds of schools are two different jobs. Moving from one to another within the same generation is a highly needed and highly challenging process.</p> <p>The main objectives of the project are the consequent results are:</p> <ul style="list-style-type: none"> • <i>Strengthen the profiles of the teaching profession</i>: the only way to transform a school is to make teachers change their behaviour. The first output (O1) is, therefore, a process to help them achieve this change The second output (O2) is a curriculum for training the teachers, whilst the third output (O3) is a soft skills curriculum for pupils that will reflect on teacher's soft skills; • <i>Open and innovative practices</i> in the digital area: in a transformed school, the teacher drastically reduces the number of collective explanations he/she gives. The heart of the transformation is to make the student autonomous in their learning. The Internet is not anymore a competitor to the teacher's knowledge but an ally to sustain that autonomy. • <i>Achievement of relevant and high-quality skills and competences</i>: once a school is

	<p>transformed, fast students do not have to wait for the teacher or the rest of the class anymore. They learn faster than more. Slow students too have to learn tasks in their proximal development zone: challenging but achievable. They really close the gap on their missing prerequisite skills and build much stronger foundations against discouragement and school drop out. Slow students also benefit more teacher time since fast students need lighter support.</p>
Additional links and Resources	http://SchoolTransformationLab.eu

Name of the project/good practice	ICT for minimizing dropout
Implemented by	<p>Ventspils 6.vidusskola (Latvia)</p> <ul style="list-style-type: none"> • Liceul Tehnologic Matei Basarab (Romania) • Taurages suaugusiųjų mokymo centras (Lithuania) • Sarayönü Mehmet Emine Akdogan Anadolu Lisesi (Turkey) • ISTITUTO PROFESSIONALE DI STATO PER I SERVIZI DI ENOGASTRONOMIA E OSPITALITA' ALBERGHIERA POTENZA (Italy) • SOSU OSTJYLLAND (Denmark)
Description of the project/good practice	<p>According to the latest research, one of the most important reasons for dropouts in education is the lack of lifelong learning skills in the field of ICT. Improving these skills is not only a good ground for support in the learning process, but also a necessity in work. In addition, the essential e-learning experience of teachers for implementing the process "learning in the working place" is important. Minimizing dropout rate is one of the priorities proposed by the EU.</p> <p>The main goal of the project "ICT FOR MINIMIZING DROPOUTS" was to exchange good practices among six partner schools. They have been chosen by the principle of being second chance schools (including secondary and vocational schools). All schools have had a challenge in addressing the dropout problem and supporting the students who have started their learning process after a long gap or have come from social risk families, or have had different problems in previous educational organizations.</p> <p>One of the approaches used in the implementation of the project was the meaningful use of ICT for promoting youth interest in learning and cooperation in order to reduce dropouts. Therefore, the ideas borrowed purposefully and introduced through every school's experience was useful for further work of minimizing dropouts in every partner school.</p> <p>The school mission is to promote qualitative education, which is open and flexible to student needs. 5) ISTITUTO PROFESSIONALE DI STATO PER I SERVIZI DI ENOGASTRONOMIA E OSPITALITA' ALBERGHIERA POTENZA from Italy is a kind of vocational hotel school that provides technical training and</p>

	<p>a professional maturity for the access to different areas of work and/or to continue the studies at university.</p> <p>Concerning the potential longer-term benefits, every partner has experienced new methodical approaches for providing individual support to students in order to reduce students` dropout by using ICT. In addition, the online course "Career Education in the Context of the European Single Market" is an open source that can be used by every partner in the future for motivating the students to finish the school.</p> <p>Output:</p> <ul style="list-style-type: none">• The on-line course "Career Education and guidance in the context of the European Single Market" (E-learning module, online-training, MOOC)• The project's "ICT for minimizing dropout" webpage (www.dropout.in.eu)
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Name of the project/good practice	Digital integration in the classroom courses
Implemented by	Kauno buitiniu paslaugu ir verslo mokykla Burdur Alpaslan Ali Can Bilim ve Sanat Merkez Istituto Comprensivo di Lodi SECONDO (Italy) Nuestra Señora de la Paz Colegiul Național Alexandru Ioan Cuza Agrupamento de Escolas Caldas de Vizela GYMNASIO LAVARON
Description of the project/good practice	<p>The main core of our project was to make lessons more vivid and facilitate teaching and learning processes with 21st century digital competences and innovative teaching approaches with innovative web tools. Today, digital skills are highly valued; in the future, they are vital. They are also considered to be taught as a third core subject, and treated with the same importance as numeracy and literacy in some countries.</p> <p>In the scope of the project, there were 6 LTT activities:</p> <ol style="list-style-type: none"> 1. "Eco Calendar" in Romania, 2. "Creation of an ecological land model" in Turkey, 3. The "Entrepreneurship" activity in Portugal, 4. The "I do my first App" activity in Greece, 5. Creation of the "digitally integrated book" in Italy, and 6. "SING for Europe" CD in Spain. <p>With the project, each school met new and innovative teaching and learning platforms, the pupils and the teachers had an international perspective and experienced the taste of creating new things and materials with their friends from other cultures. All these lead the persons in the schools to work more and see the education, teaching and training process from a different point of view.</p> <p>The methodology was project based combination of eTwinning and itec-designing the classrooms of the future with 21st century digital competences with different and educative web 2.0 tools-prezi, 3d sketch up, augmented reality, aurasma, digital storytelling bitstrips, story jumper, virtual classroom-edmodo and innovative approaches such</p>

	as flipped classroom-learning to learn were in the heart of the project and we have been inspired by the future lab.
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11.3. Spain

Name of the project/good practice	DIGI_SETS (Digital Skills Evaluation Tool and Support)
Implemented by	Spain, Bulgaria, Greece and Austria
Description of the project/good practice	<p>One of the main competences of integration in the twenty-first century labor market is digital skills and abilities to work in digital and networked contexts. Challenges and changes associated with "Work 4.0" have impacted many sectors of the economy, including tourism and retail. Employees with relatively low-skill assignments must have digital abilities and comprehension in order to function effectively. In brief, there is a tendency toward digitalization in services, as well as a need for multi-disciplinary digital qualifications.</p> <p>The EU has acknowledged this trend and has created a "Digital Competence Framework" to outline the various characteristics and degrees of digital abilities that are relevant in both work and personal life. In Austria, the Ministry of Digitalization and Economy has modified the framework to include more dimensions and aspects of digital literacy in everyday life, and the Public Employment Service has a working group on new skills that concludes that there is a great and growing demand for new skills in all economic sectors, including tourism and retail.</p> <p>As a result, every discussion of the problem must include a consideration of digital education. The demand for digital skills has increased, and many job seekers lack the necessary abilities to adapt to a digital workplace. Additionally, there is a scarcity of accessible/transparent tools for organizations and stakeholders to assess and enhance their current digital abilities.</p> <p>The main objective of the DIGI_SETS (Digital Skills Evaluation Tool and Support) project is to design and implement a</p>

	<p>digital skills framework for people wishing to work in the tourism and retail sector, as well as a toolbox for trainers to measure and improve those skills required for the job. The DIGI_SETS project has a duration of 24 months.</p> <p>In addition, the project takes into account the current trends of digitalisation and automation in an increasing number of service industry sectors (making digital skills also necessary in unskilled manual jobs).</p> <p>DIGISETS wants to develop and test these tools in training workshops, and subsequently make them available to other stakeholders, education and labour market policy makers and industry, as well as other external experts.</p> <p>The project results will also be shared online, and the training material and results will be disseminated to stakeholders across the Erasmus programme region through the Erasmus+ results platform.</p>
Additional links and Resources	<p>https://ipcenter.international/digisets/</p>

Name of the project/good practice	Educa en Digital (Educate digitally)
Implemented by	Spain's Government
Description of the project/good practice	<p>The health crisis caused by COVID-19 has changed the reality inside and outside the classroom.</p> <p>Most of the educational centres were familiar with and used the digital environment, but the current circumstances have forced an accelerated conversion. Present and future are online. Digitalisation has a problem: the digital divide faced by the most disadvantaged.</p> <p>According to the Ministry of Education, around 800,000 households with children do not have electronic devices and therefore do not have the possibility of following the course online.</p> <p>Educa en Digital was created with the aim of promoting uniform digitalisation, without gaps.</p> <p>The programme is divided into three pillars:</p> <ul style="list-style-type: none"> • Putting 750,000 electronic devices in the hands of schools to accelerate digitisation. Part of this hardware will be offered to the most disadvantaged pupils through loans. • Designing platforms to assist teachers and students based on Artificial Intelligence. The aim will be to offer personalised education adapted to new circumstances. • Improve teachers' digital skills training through courses, materials and tools. <p>This programme is largely financed by European ERDF funds (managed through the digital transformation portal red.es), but is also supported by regional funding.</p>

	<p>This aid will be aimed at improving the digital transformation of the educational environment and promoting access to them for all pupils.</p> <p>Electronic devices will account for the largest share of the funding.</p>
Additional links and Resources	https://www.robotix.es/blog/programa-educa-en-digital/
Name of the project/good practice	Espacio Digital Greta (Greta Digital Space)
Implemented by	Grupo Anaya (Publishing Company)
Description of the project/good practice	<p>Grupo Anaya is a Spanish publishing house held by the French conglomerate Lagardère, with a focus on textbook production and a diverse range of imprints and publications. The Espacio Digital Greta, a platform that provides educational centers with various sorts of digital resources, is one of its digital activities.</p> <p>It is distinguished by characteristics that allow textbooks and other materials used by teachers and students to be combined into a single access point. It is based on the concept of Virtual Learning Environments (VLEs), which allow for the natural integration of many aspects and actions that occur in the creation of daily classes, homework, and communication with families in the classroom.</p> <p>One of the unique features of this space is the ability to integrate digital textbooks from various publishers, which are supplemented by services and tools for teacher creation, allowing for the personalization of the teaching experience in order to adapt and support each student's learning process.</p> <p>Greta also offers individualized teaching modules, a class notebook, individualized assignments, a resource bank, interactive exercises, and daily classroom and collaborative work monitoring. Greta Digital Space is a platform for teaching and learning in a technology environment, as well as a gathering</p>

	place for instructors and students, that gives direct access to digital information and is installed on the school's server.
Additional links and Resources	http://www.fundacionorange.es/wp-content/uploads/2016/11/eE_La_transformacion_digital_del_sector_educacion-1.pdf

11.4. Denmark

Name of the project/good practice	Supporting the learning process with feedback and reflection
Implemented by	Danish Youth Team (DK)
Description of the project/good practice	<p>Providing timely and specific feedback as youth workers are working on the assignments. It is important to remember that reflection on feedback is where learning happens. Therefore, we are including the opportunity to give & receive feedback during our online mobilities in order to ensure a proper learning process.</p> <p>We used this practice in February 2021 during an online TC related to the CBY project "YSEEAM" - Youth Entrepreneurship Education for All with Moodle.</p>
Additional links and Resources	

Name of the project/good practice	Building relationships
Implemented by	Danish Youth Team (DK)
Description of the project/good practice	<p>As early as the first session, our trainers and facilitators are working on establishing trust and friendliness with the youngsters/youth workers. Now, more than ever, relationships are essential in the virtual environment. That is why we are engaging the attendees in virtual energizers and "get to know you" activities in a synchronous environment which will also help participants connect with each other. Even though these activities may seem simple, they help to build a safe learning environment.</p> <p>We used this practice in February 2021 during an online TC</p>

	related to the CBY project "YSEEAM" - Youth Entrepreneurship Education for All with Moodle.
Additional links and Resources	

Name of the project/good practice	Adapting for asynchronous learning
Implemented by	Danish Youth Team (DK)
Description of the project/good practice	<p>As co-organizers of a virtual mobility with participants from 4 different continents, we realized that some of the participants were not able to watch the live streamed sessions due to various reasons, such as timing, internet access or the ability to focus on a lesson via videoconference.</p> <p>Therefore, we recorded all the sessions and we made them available for participants to review and access them later on. We used Google Classroom to upload and store all the recorded sessions.</p> <p>In addition, we use the app Otter.ai to generate transcripts from the audio material.</p> <p>We used this practice in February 2021 during an online TC related to the CBY project "YSEEAM" - Youth Entrepreneurship Education for All with Moodle.</p>
Additional links and Resources	Google Classroom Otter.ai

11.5. Slovak Republic

Name of the project/good practice	HEALTH, WHAT ARE YOU ASHAMED TO ASK? KA3
Implemented by	KERIC
Description of the project/good practice	<p>Project is focused on Youth activism and the opportunity to open up topics that are often taboo.</p> <p>Project has 3 parts.</p> <p>2 hours online workshops for students age 13 to 18 lead by international volunteers online where we discuss mental wellbeing and ways to cope</p> <p>3 weekend training sessions for 15 students the age 13 to 18 with topics of Mental health, Sexual health and healthy relationships. Here we go deeper to the topics and discuss what are their responsibilities and rights as teenagers in Slovakia, where can they find help if they need any and how we should support people in need.</p> <p>Last part is a reflection on activities we took part in and trying to accommodate it for formal settings of schools as help to schools. Students organize an event for local teachers and city councils where they present their work as well as an online conference for foreign organizations to share their findings .</p>
Additional links and Resources	https://www.keric.sk/sk/workshopy-a-skolenia/1212-40-escape-rooms-a-7-well-being-workshopov-pre-14-roznych-skol
Name of the project/good practice	ESCalator Incubator napadov- incubator of ideas
Implemented by	Iuventa- National Agency Slovakia

Description of the project/good practice	<p>4 day training for young people to learn how to build up a project idea and apply for ESC Solidarity projects.</p> <p>During the four days participants had the opportunity to look at their communities, search for changes that need to happen, ideas how to improve them and step by step plans that will lead to successful projects.</p> <p>It is followed by an online conference for everyone who wants to share good ideas and practices of Solidarity based projects and help others achieve their goals.</p>
Additional links and Resources	<p>https://www.facebook.com/groups/961113014083717</p> <p>https://www.keric.sk/sk/workshopy-a-skolenia/1191-skolenie-escalator</p>

Name of the project/good practice	Hodinovi zaskolaci
Implemented by	Hodinovi zaskolaci
Description of the project/good practice	<p>A project for primary schools started by active teacher David Kralik and volunteers to teach different subjects for any age of primary schools in an interactive way. They have developed a series of Escape rooms using Prezi, Flippity, Canva and Jamboard to teach children online all around Slovakia. After running for a year, they got supported financially by Orange foundation and Ministry of Education. Now they are running officially as an NGO and teach this method to other educators around the country.</p>
Additional links and Resources	<p>https://www.facebook.com/groups/348474786417831</p>

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