# Our Digital Village

## National report

after the RMA workshops - Cyprus

## 'Digital competences in the Municipality of Pafos (Cyprus): challenges and aspirations of the community'

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December 2023

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# Contents



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# Introduction

Starting off, it is essential to talk about Cyprus's population. Cyprus's population makes up 0.2 percent of all the people living in the 28 member states of the European Union. After Malta and Luxembourg, which had total populations of 514.600 and 626.100 at the end of 2019, respectively, Cyprus has the third-smallest population.

Historically, after 1977 and the development of the urban system of Cyprus the rural agricultural hinterland was shrinkage. In general a network of coastal towns with the capital city in the central plains was evolved which was completed by groupings of rural communities, each focusing on the nearest urban area. Consequently, the island's urban system has always included links between rural and urban areas. Communities surrounding major urban centers have been gradually incorporated into medium-sized or smaller agglomerations, while maintaining their original municipal boundaries, as a result of the urbanization trends that started in the 1950s and picked up speed in the 1970s. Simultaneously, farther-flung communities have declined in favor of stronger, urban-rural rings encircling each metropolitan area.

Furthermore, Cyprus has two medium-sized urban agglomerations, centered around each of the island's four major municipalities, Nicosia and Limassol, and two smaller ones, centered around Larnaca and Paphos. The four urban agglomerations contain approximately 70% of the nation's population densities, according to the most recent estimates available for 2014. Mountainous areas have the lowest population densities and the fastest rate of population decline, while the areas surrounding the four urban agglomerations have the highest densities.

With regard to policy, each of the major cities serves as the administrative center of the district in which it is situated, and all of the villages that are inside its borders look to it for services that are of general interest. Since the 1980s, road travel and communications have made it possible for these communities to look for employment and engage in economic activities in their respective urban areas, as the productive capacities of the countryside have diminished.

Finally, when it comes to education it is important to note that Public schools in urban and rural áreas are mainly financed from public funds. Cyprus's public education system is highly centralized, with headmasters and teachers appointed, promoted, and transferred by the independent five-member Educational Service Commission, which is appointed by the President of the Republic for a six-year term. Both the creation of educational legislation and its enforcement fall under the purview of the Ministry of Education, Culture, Sport, and Youth. It specifies textbooks, curricula, and syllabuses. School committees, working under the direction of the Ministry of Education, Culture, Sport, and Youth's technical services, are in charge of building, maintaining, and equipping public schools.

# Method

The methodology involved conducting self-analysis workshops, was utilizing the "Reciprocal Maieutic Approach" (RMA) methodological framework, which was created and provided by CSC Danilo Dolci. In a more general context the goal of the Reciprocal Maieutic Approach (RMA), a methodology firmly based in the Socratic method of teaching, is to extract knowledge and promote critical thinking through cooperative inquiry and reciprocal dialogue. This method has its roots in the concept of maieutics, which was developed by the Greek philosopher Socrates. Through guided questioning and discourse, Socrates used a technique akin to "midwifery" to assist people in giving birth to their own ideas. Known for his Socratic method, Socrates facilitated conversations with his students that aimed to question presumptions, encourage critical thinking, and stimulate introspection. Through a series

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of thought-provoking questions and dialogue, his method helped participants progressively discover deeper truths or inconsistencies in their own beliefs. Building on this base, RMA broadens the idea to establish a forum for reciprocal communication between participants, highlighting group inquiry and knowledge creation.

Back to the workshops, in order to concentrate the context analysis on the requirements and preferences associated with the digital transformation, the RMA method and the session features were modified to fit the goals and context of the Our Digital Village project. With the use of the questions created and provided to each partner from CSC Danilo Dolci, the workshops had last from two to three hours. However, there was a small adjustment to the length of the workshops due to participant availability. Since the great majority of participants were members of the educational community, teachers/educational staff and students, it was impossible to engage them in two- or three-hour sessions for three different workshops. Therefore, the sessions were quite brief (1 hour per session).

The self-analysis workshops had to be 9 in total. Three workshops for the introductory phase with all three groups, three workshops for the self-analysis phase again with each group separately and then three mixed workshops having participants from each group together.

Three target groups have participated in the self-analysis workshops, which have been conducted under the direction of the maieutic coordinator:

1. Educational teaching staff
2. School Students
3. Adult learners (of the community)

These target groups participated in three-round self-analysis workshops:

**1. The introductory workshops**

During the introductory workshops that were 1 per target group (3 in total) participants started by introducing themselves and sharing their aspiration of the future. Starting off in a laid-back way created an atmosphere where people felt comfortable and encouraged to share their thoughts and needs. As the conversation progressed, the participants shared their experience living in rural area. This section revealed the participants' priorities and the main challenges they face with digital skills, as well as how they view and interact with their environment. Gaining insight into their viewpoints also demonstrated how dependent they are on digital tools and how important digital skills are to the community.

0. **The self-analysis workshops**.

The self-analysis workshops assisted in gaining a deeper understanding of the current state of teaching and learning about digital technologies, as well as the ideas and attitudes of the target groups toward digital skills, technologies, and education. It was important to identify the specific needs and desires of each target group with a focus on digital skills and education, as well as their needs and desires in general.

**0. The self-analysis workshops of mixed groups**

For the final step, three groups of participants from the previous sessions formed for the third and final round of workshops. As a result, adult learners, students, and teachers/trainers formed each mixed group. These

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mixed workshops aimed to better understand each other's needs, desires, and areas of overlap by compiling the needs and desires found in the earlier stages and sharing them to other target groups. In the sense that everyone in the community agrees and is aware of each other's needs, interests, and desires, this was a crucial step in the process of identifying shared needs.

## Participants

A total of 43 participants took part in the workshops, including school students, educational staff, adult of the community. There were 32 female participants and 11 male participants, distributed as follows by group: 26 school students, 9 teachers, 8 adults of the community.

**Introductory workshop - Students**

| Group | Organisation/School | Gender | Identification |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | M | P1CY |
| Student | Saint Neophytos Lyceum | M | P2CY |
| Student | Saint Neophytos Lyceum | M | P3CY |
| Student | Saint Neophytos Lyceum | F | P4CY |
| Student | Saint Neophytos Lyceum | M | P5CY |
| Student | Saint Neophytos Lyceum | M | P6CY |
| Student | Saint Neophytos Lyceum | M | P7CY |
| Student | Saint Neophytos Lyceum | F | P8CY |
| Student | Saint Neophytos Lyceum | F | P9CY |
| Student | Saint Neophytos Lyceum | F | P10CY |
| Student | Saint Neophytos Lyceum | F | P1 CY |
| Student | Saint Neophytos Lyceum | F | P12 CY |
| Student | Saint Neophytos Lyceum | F | P13 CY |
| Student | Saint Neophytos Lyceum | F | P14 CY |
| Student | Saint Neophytos Lyceum | F | P15 CY |
| Student | Saint Neophytos Lyceum | F | P16 CY |
| Student | Saint Neophytos Lyceum | F | P17 CY |
| Student | Saint Neophytos Lyceum | F | P18 CY |
| Student | Saint Neophytos Lyceum | F | P19 CY |
| Student | Saint Neophytos Lyceum | F | P20 CY |
| Student | Saint Neophytos Lyceum | F | P21 CY |
| Student | Saint Neophytos Lyceum | F | P22 CY |
| Student | Saint Neophytos Lyceum | F | P23 CY |

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| | | | |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | F | P24 CY |
| Student | Saint Neophytos Lyceum | F | P25 CY |
| Student | Saint Neophytos Lyceum | F | P26 CY |

**Introductory workshop – Educators/Teachers**

| Group | Organisation/School | Gender | Identification |
|---|---|---|---|
| Educator/teacher | Saint Neophytos Lyceum | F | P1CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P2CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P3CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P4CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P5CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P6CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P7CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P8CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P9CY |

**Introductory workshop – Adult Learners**

| Group | Organisation | Gender | Identification |
|---|---|---|---|
| Adult Learner | N/A | F | P1CY |
| Adult Learner | N/A | M | P2CY |
| Adult Learner | N/A | M | P3CY |
| Adult Learner | N/A | M | P4CY |
| Adult Learner | N/A | M | P5CY |
| Adult Learner | N/A | F | P6CY |
| Adult Learner | N/A | F | P7CY |

**Self analysis workshop – Students**

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| Group | Organisation/School | Gender | Identification |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | M | P1CY |
| Student | Saint Neophytos Lyceum | M | P2CY |
| Student | Saint Neophytos Lyceum | M | P3CY |
| Student | Saint Neophytos Lyceum | F | P4CY |
| Student | Saint Neophytos Lyceum | M | P5CY |
| Student | Saint Neophytos Lyceum | M | P6CY |
| Student | Saint Neophytos Lyceum | F | P7CY |
| Student | Saint Neophytos Lyceum | F | P8CY |
| Student | Saint Neophytos Lyceum | F | P9CY |
| Student | Saint Neophytos Lyceum | F | P10CY |
| Student | Saint Neophytos Lyceum | F | P1 CY |
| Student | Saint Neophytos Lyceum | F | P12 CY |
| Student | Saint Neophytos Lyceum | F | P13 CY |
| Student | Saint Neophytos Lyceum | F | P14 CY |
| Student | Saint Neophytos Lyceum | F | P15 CY |
| Student | Saint Neophytos Lyceum | F | P16 CY |
| Student | Saint Neophytos Lyceum | F | P17 CY |
| Student | Saint Neophytos Lyceum | F | P18 CY |
| Student | Saint Neophytos Lyceum | F | P19 CY |

**Self analysis workshop – Educators/Teachers**

| Group | Organisation/School | Gender | Identification |
|---|---|---|---|
| Educator/teacher | Saint Neophytos Lyceum | F | P1CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P2CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P3CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P4CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P5CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P6CY |

**Self analysis workshop – Adult Learners**

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| Group | Organisation | Gender | Identification |
|---|---|---|---|
| Adult Learner | N/A | F | P1CY |
| Adult Learner | N/A | M | P2CY |
| Adult Learner | N/A | M | P3CY |
| Adult Learner | N/A | M | P4CY |
| Adult Learner | N/A | M | P5CY |
| Adult Learner | N/A | F | P6CY |
| Adult Learner | N/A | F | P7CY |

## Mixed workshops

### Mixed group 1

| Group | Organisation | Gender | Identification |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | F | P1CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P2CY- |
| Student | Saint Neophytos Lyceum | M | P3CY |
| Student | Saint Neophytos Lyceum | F | P4CY |
| Student | Saint Neophytos Lyceum | F | P5CY |
| Student | Saint Neophytos Lyceum | F | P6CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P7CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P8CY |

### Mixed group 2

| Group | Organisation | Gender | Identification |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | F | P1CY |
| Student | Saint Neophytos Lyceum | F | P2CY |
| Student | Saint Neophytos Lyceum | F | P3CY |
| Student | Saint Neophytos Lyceum | F | P4CY |
| Adult Learner | N/A | M | P5CY |
| Student | Saint Neophytos Lyceum | F | P6CY |
| Student | Saint Neophytos Lyceum | F | P7CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P8CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P9CY |

### Mixed group 3

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| Group | Organisation | Email address | Identification |
|---|---|---|---|
| Student | Saint Neophytos Lyceum | M | P1CY |
| Student | Saint Neophytos Lyceum | M | P2CY |
| Student | Saint Neophytos Lyceum | F | P3CY |
| Student | Saint Neophytos Lyceum | F | P4CY |
| Student | Saint Neophytos Lyceum | F | P5CY |
| Student | Saint Neophytos Lyceum | M | P6CY |
| Student | Saint Neophytos Lyceum | M | P7CY |
| Student | Saint Neophytos Lyceum | F | P8CY |
| Student | Saint Neophytos Lyceum | F | P9CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P10CY |
| Educator/teacher | Saint Neophytos Lyceum | F | P11CY |

## Information tools

The workshops utilizing the reciprocal maieutic approach served as the method of data collection, gathering qualitative data. Regarding the Reciprocal Maieutic Approach, it is a model of mutual communication that happens via maieutic discourse. Putting on a maieutic workshop doesn't mean posing queries and waiting for preset responses. The art of posing questions and casting doubts is where discussions, critical thinking, creativity, and an overall sense of fulfilment and well-being originate. Each participant plays a leading role in the process and helps to create a conversation that never wanes or results in a stalling of ideas.

## Data analysis

**1 - Introductory Workshops**

| Category | Subcategory |
|---|---|
| 1. Advantages and challenges of the rural community | 1.1 Advantages<br>1.2 Challenges |
| 2. Definition of digital skills | 2.1 Ability<br>2.2 Use<br>2.3 Create Share |
| 3. Caring about digital skills | 3.1 High importance<br>3.2 Medium importance<br>3.3 Low importance |

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| | |
|---|---|
| 4. Reliance on digital skills | 4.1 Reliance for educational purposes<br>4.2 Reliance for social purposes<br>4.3 Reliance for work purposes |

**2- Self – Analysis Workshops**

| Category | Subcategory |
|---|---|
| 1. Confidence on own level of digital skills | 1.1 Low level<br>0. Medium level<br>1.3 High level |
| 2. Typology of digital tools | 2.1 Social networks<br>2.2 Creative tools<br>2.3 Gaming tools<br>0. Media tools |
| 3. Acquisition | 3.1 Self-taught<br>0. School or High School<br>3.3 Private academy<br>3.4 Friends or relatives |
| 4. Importance and improvement | 4.1 Social aspects<br>4.2 Security aspects<br>4.3 Management aspects<br>4.4 Technical aspects |
| 5. Emergent technologies knowledge and contribution | 5.1 High knowledge<br>5.2 Medium knowledge<br>5.3 Low knowledge<br>5.4 Contribution |

**Mixed Workshops:**

1. Each person introduces themselves and shares their needs and desires.

2. The moderator presents a summary of the conclusions of the other sessions about the needs of each group.

3. Question: Among the needs that were presented, which do you think are the most important for the community? It is possible to use any methodology, e.g. voting, color signs, checks, etc.

4. Question: Since we're all here together, it is better to share some ideas to be introduced and that could be ideal to propose together with our planned initiatives. Do you have some ideas to propose?

5. At the end of the session, we can ask for 1-word feedback about the sessions.

# Results

**INTRODUCTORY MEETINGS**

There are four categories of the introductory meetings for articulating the results of this study: advantages and challenges of participants' (rural) community; definition of DIGITAL SKILLS; caring about digital skills in their community; reliance on the use of digital services by them and their community.

**1. In your opinion, what are the advantages and challenges of your (rural) community?**

The three groups unanimously acknowledged the evolving digital landscape within the broader community, recognizing it as a significant advantage.

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The educators emphasized the students' inherent proficiency in digital skills, citing their adeptness in utilizing computers and video projectors. The younger generation's natural affinity for technology was evident.

- "The students are up to date when it comes to using technology" P9CY- Educational staff.

Within the workshop, students specifically noted the positives within their school community, citing the increased technological integration such as the use of platforms like Teams for lesson activities.

- "There is a computer and a projector in almost every classroom" P16CY-student.

When it comes to adult learners, they stressed out that communicty is advancing and everything slowly becomes digitalized.

- "In order to pay for parking, you need to use your phone device" P2CY-adult.
- "We need to have digital skills to even pay the bills" (P1CY-adult)

As to the **challenges** they are facing, all three groups shared that the school community lacks up-to-date equipment and technological tools

- "Sometimes in lessons we might be asked to watch a video, but there are no headsets to do so and the sound of all computers and videos is playing everywhere which is really distracting." P24-student
- "The computers take more than 10 minutes to work and always glitch due to the old software" P1CY – educational staff.
- "School also lacks online platforms (like Moodle) where teachers can upload lesson material for the students and extra activities or resources" P1CY & P7CY adults.

Furthermore, they shared problems with internet connection and the use of mobile phones during school hours.

- "There is no Wi-Fi in all school premises, and sometimes the internet in the classroom is also really slow" P6CY student.
- "Students sometimes use their phone in classroom but not for lesson purposes which makes the lesson challenging". P2CY educational staff
- "It is true that students might use their phones during lesson and make the lesson challenging but we have to have in mind that with no technology they criticize the reason why they should learn things" P9CY- educational staff.

**2. How do you define DIGITAL SKILLS?**

When it comes to defining digital skills all groups and participants shared almost the same general and quite basic definition. Everybody shared those Digital skills is the knowledge of using computer and other technological tools. Since some of the adult and educators had a background in ICT, they kind of went a little further to providing a definition of digital skills. The shared that digital skills are not only the use of technological equipment but also the use of software and applications. There was only one student who talked about the use of software and applications because of having computer science as their major in high school.

"Technology is knowing how to use specific technological equipment, software and editing tools" P22CY student.

"In computer lessons we might have to use specific software or applications" P1CY – educational staff.

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"In order to define digital skills, we need to have in mind that digital skills is the combination of things, such as the use of: 1. equipment, 2. software, as well as having a user and there is correct use of the above" P1CY-educational staff.

**During the definition of digital skills some social media platforms made their appearance. The first was Instagram which helps to share one's adventures as said by the participant and the other one was the use of digital skills while using social media in order to be updated for the current national and international affairs.**

"Using Instagram to share our adventures and thoughts with our friends" P12CY – student.

"Personally, social media and online websites help me be up to date for things that happen around the world". P5CY adult

**3. How much do you care about digital skills in your community?**

All participants shared that having digital skills in their community (talking mostly about the school community) is of great importance. The students said that the use of AI is important especially for some presentations or while searching for new ideas for their schoolwork.

"I am using ChatGPT, mostly to search about different topics and gain ideas about several subjects, especially literature" P24CY-student.

Educators added that having digital skills helps to make the learning experience more interactive, it helps you save up time and include students with learning disabilities that sometimes can feel left alone.

"Digital Skills are a strong tool which aims to reinforce both education and life" P4CY-educational staff.

"Knowing how to use the technological tools and by having even basic digital knowledge can help all teachers save up time especially if they are using tools during their lessons" P6CY- educational staff.

"Multimedia applications for students with learning difficulties are also essential and helpful" P3CY educational staff.

**4. How do you and your community rely on the use of digital services? If so, for what purposes?**

The reliance on the use of digital services was divided in 3 different sections, reliance for educational, social and work purposes.

For the educational purposes teachers/educators shared that they rely on the technological equipment that is provided at school in order to make the lessons more interactive and fun for their students with the use of interactive boards and the video projector:

"We try to use the technologies that we have inside our classroom such as video projectors to make lessons more interactive and interesting for students". P3CY-educational staff.

One of the educators shared that using digital skills and the technologies is basically part of her job as an IT teacher:

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"Using digital skills and technologies is essential for my lesson as I am a computer teacher" P1CY – educational staff.

And other teachers with different educational backgrounds shared that especially in sciences like biology, chemistry and physics the use of digital skills and technological equipment is essential.

"I use a computer to show student simulations for the chemistry lesson" P3CY-educational staff.

"We also use simulations in biology" P4CY educational staff.

"Simulations are essential for physics as well" P9CY educational staff.

Students shared that they do rely on digital skills but in the school framework they rely mostly on using the computer and some software (power point) for their school projects and their homework.

"We sometimes need to log in at teams to find more material for our homework". P26CY -student.

"We also use digital skills for our projects" P22CY – student**.**

For social aspect, the participants agreed that they are using their digital skills for leisure activities, to communicate with other people (friends, family, kids) as well as to find out about different events that happen in their community. Adults added that they use digital skills to pay bills, banking etc.

"I am using digital skills to get updated about different events that happen in my community" P5CY – adult learner.

"I am using social media to communicate with my friends" P12CY – student.

**On a final note, when it comes to using digital skills for work purposes, they adults mostly spoke about the fact that pandemic stressed out to everyone the importance of having digital skills.**

"Due to covid it was essential to learn how to use new platforms for both our working purposes and in order for our kids to attend their lessons" P1CY -adult.

"I am an IT and therefore use technology everyday for my work" P3CY -adult.

**SELF-ANALYSIS WORKSHOPS**

**The self-analysis workshops fall into five categories to help clarify the study's findings:** confidence in the participants' level of digital skill; familiarity with or use of digital tools; acquisition of digital skills; importance of digital skills in teaching; areas for improvement in digital skills; and knowledge of coding, robotics, microcontrollers, web development, 3D modeling, and printing, as well as their role in everyday and professional lives.

**1. Are you confident with your level of digital skills?**

This question had different answers per target group. Students believe that they have a medium knowledge and confidence about their level of digital skills, as well as one participant from the adult learners and some of the educators.

- "There are a lot of things we still need to learn" P14CY-student.
- "I got my ECDL certification, but still, I feel that there are more things I can and should learn" P10CY-student.

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- "I sure need training and guidance, especially if I am going to use a new software or technological tool in order to have better results" P1CY-adult.
- "I would say that I have the basic knowledge to use some technologies, but I also need to be up to date with the new technologies and digital skills" P4CY-educator.
- "In physics, using technological tools requires good digital skills. By using technology, the lesson can become more interactive, however I believe that all of us need to have proper training in order to make it even easier to use the technological tools provided to us" P6CY-educator.
- "I am using my digital skills and software during my lessons, but I feel like I need to change the old software we are currently using to a new one and I need training to do so" P2CY-educator.

On the other hand, one of the teachers shared being confident and having a high knowledge of digital skills. Some of the adult learners felt the same way due to their IT background.

- "I am an IT teacher, I have studied computer science, therefore I would say that my level is high" P1CY.
- "It's my job, I use digital skills everyday" P2CY adult
- "I have studied computer science, and I am working in the field as well, therefore I am quite confident. However, there is always room for improvement". P3CY adult

Finally, there was only one participant that shared the challenges they are facing with technological advancements and the need have digital skills, which makes them thing their digital skills level is low:

- "I am not so confident when it comes to digital skills, everything changes day by day and technology is becoming more challenging" P3CY-educator

**2. What are the digital tools that you use or are aware of/familiar with?**

When it comes to sharing the digital tools that the participants use or are familiar with they were ask to divide them in four categories, social, creative, gaming and media.

For the social digital tools, the participants talked about email, Microsoft teams and other social platforms.

- "I am using email especially for work" P1CY-adult
- "Due to covid, zoom and skype were essential both for my work meetings and for my kids' education, therefore I was "forced" to become aware" P1CY-adult
- "It is true my kids as well, were using Zoom for their school lessons". P7CY-adult
- "I am using telegram and Webex for work purposes" P4CY-adult
- We all use social networking in our everyday lives" P4CY-educator
- " Microsoft Teams were provided to us and our students through the ministry of education during covid, however students seem to be facing a lot of problems while using it" P1CY-educator
- "It is true, using teams is a problem due to security reasons as students should change their credentials every 3-6 months" P6CY-educator
- "I use them every day, to communicate with my friends". P15CY-student
- "I use social media platforms to relax". P6CY-student
- "Social media platforms are important to me, I speak to my friends, learn new things and relax while watching videos on TikTok" P12CY-student

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- "BeReal is the newest addition to our social networks, and helps us share our moments with our friends" P17CY-student

When it comes to the creative tool that they are using, only one participant from educators talked about it.

- "During computer lessons we try to help students be more creative and introduce some creative tools they can use" P1CY-educators

Moreover, when it comes to gaming only students and educators spoken about the gaming tools they use within school.

- "Kahoot is really interactive, and we use it sometimes during our lessons" P4CY-educator.
- "As a mathematician, I do use the open software GeoGebra. However, it is really old, and I would love to learn how to use a new software to show my students" P2CY-educator.
- "In chemistry lessons we are using simulations to show some experiments" P3CY-educator.
- "There are teachers that use kahoot now and then and it makes our lessons more interactive." P13CY-student
- "In chemistry and biology simulation software are used and are quite helpful" P8CY-student.
- "It is amazing to have a look at the interactive maps. History lessons have become more interesting." P10CY-student

Finally, the media that they use again within school are youtube.

- "Some teachers use videos for their lessons. " P9CY-student
- "I would say that YouTube is not a good tool to use because last time the teacher was searching for the video for more than 10 minutes." P2CY-student
- "Sometimes to make the lesson more interactive we use youtube. Watching videos makes them pay more attention" P2CY-educator.

**3. How did you acquire your digital skills?**

Participants shared that in order to acquire digital skills sometimes they learn by themselves (self-taught).

- "Due to the fact that everything is becoming digital (bank, paying bills etc) I am trying to learn along the wat on my own" P1CY- adult.
- "I am trying my best to learn more about digital skills and educational tools that can be used for making the lessons more interactive, through scientific articles and sometimes videos" P3CY- educator.
- "We all have to learn to use teams during covid by ourselves, especially the features like muting, sharing screen etc" P4CY-educator.
- Digital skills and technology are part of our daily lives and therefore we are experimenting." P15CY – student
- "Different platforms, social media, software help us to experiment and gain more digital skills." P11CY-student

**When it comes to acquiring digital skills through school and high school:**

- "I acquired most of my digital skills during university" P2CY-adult.
- "I have acquired digital skills from university, as well as, from working in this domain" P3CY-adult.
- In secondary school we were able to obtain the ECDL certification" P12CY-student

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- "During the seminar for teachers' day (2 per year) there are a series of seminars that we attend, however it is not a hands- on experience even if the seminar talks about new technologies or digital skills" P5CY-educator.

For acquiring the digital skills through private academy participants shared:

- "I wanted to acquire some digital skills and decided to pay for a private academy" P1CY-adult.
- "The ministry of education used to provide courses designed for teachers, it was more like different seminars for digital skills, however this dates back to 2012" P3CY- educator.
- "There is no digital education when it comes to software for mathematics" P2CY-educator.
- "I am having afternoon lessons in order to gain more knowledge on digital skills as well as to get a certification". P8CY-student

Finally, only students and adults spoke about acquiring digital skills from friends and relatives.

- "My kids are always teaching me new things when it comes to social media and how to use them" P1CY-adult.
- "After discussions with some friends, there are some new information that I learn about social media mostly" P5CY-adult.
- "Technology is everywhere around my house". P10CY-student
- "The times we are living in forces us to use them" P19CY-student.

1. **Which aspects of digital skills are more important in your teaching and which ones would you like to improve?**

As to the aspects of digital skills that are more important in teaching/learning/working and the ones they would like to improve, students, educators and adult learners all answered that the technical aspect is the most important one.

- "Computers are extremely slow and sometimes glitch while using them." P6CY -student
- "I would say either change or get rid of the interactive boards. Most of our teachers do not have the skills to use the boards. We hardly have any lessons using the interactive board." P1CY
- "The school has a 3D printer but the only teacher that has access to it is the teacher who teaches technology". P4CY -educator
- "I would like to use the 3D printer to create prototypes." P2CY-educator
- I would like to be able to create a website so that I can upload the lesson's materials and all students to have access from everywhere". P6CY-educator
- "I do not know how to use the interactive boards that the school has, I would like to have a training because in previous schools there were not any" P2CY-educator.
- "Mobile phones are part of our everyday lives" P4CY- adults.
- "I am using computer due to my work" P1CY, P2CY P3CY, P5CY (all adults)
- "I am an IT, therefore using computers and other technological equipment is what I do" P3CY-adults.

When it comes to management and content, only the educators answered. The management goes to the need of digital skills for the general school's management.

- "The school is advancing when it comes to using digital skills for management aspects. Everything (absences, suspensions, entry and exit permit) are done electronically" P1CY-educator.

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- "I would like to create prototypes to show my students during our biology lesson with the use of 3D printer" P4CY- educator.

For the security aspects only, adults shared that security and being safe while using technology is important, as well as accepting that everything in the community and school is becoming digital.

- "It is essential to have the proper training especially for tools and software you have never used before. Users of all ages must be safe while using technology". P6CY- adults.
- "In order to communicate with our kids and family, the use of social networks is inevitable". P1CY-adults
- "Everything is becoming digital; you can't go against the tide". P5CY-adults
- "Sending emails and using social networks is part of my job". P3CY-adults
- "I personally use digital skills to be up to date about current international and national affairs". P1CY-adults
- "Information about what is going on in the world is one click away". P2CY-adults

**0. Do you know something about Coding, Robotics, Microcontrollers and web-development, 3D modeling and printing? How do you think they could contribute to your daily and working life?**

To this final question the participants answered that they have either high knowledge about the above or very low knowledge for them.

Some of the adult learners and educators answered that they have high knowledge about the above and those people that have high knowledge are the ones whose field is computer science.

- "Some of the above as IT's we are using them in our work, maybe not every day but in general" P2CY- adult.
- "I do use most of the above in my work, however I do not know how these skills can be useful for other lessons" P1CY-educator.

On the other hand, there were the students, educators and adult learners whose field of education is not computer science. Even though the shared of having really low level of knowledge all of them heard about them at least once in their lives.

- "I know that they exist, but it is not my field and I do not use any of them in my work and personal life". P7CY-adult
- "I have seen the technology however I do not know how to use it to create something, I am open to learn" P4CY-educator.
- "We have a general knowledge of what they are but never went in depth here at school" P6CY-student.
- "I know that if you want to learn robotics, you need to have afternoon lessons because the curriculum does not provide any information nor lessons on robotics" P18CY-student.
- "These digital skills can be useful to students who might want to study computer science later on" P19CY -student.

## MIXED WORKSHOPS

### Mixed workshop 1

In the recent workshop discussions, a strong consensus was reached among the participants regarding the community's pressing need for technological upgrades. Their focus was on pivotal tools such as interactive digital screens, envisaged as versatile platforms for collaborative learning. Additionally, the request for laptops to facilitate impeccable access to information, software updates to streamline processes, and advancements in existing technologies to bridge gaps. Moreover, the desire for cutting-

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edge projectors and the adaptability of tablets for enriched educational experiences seemed to resonate incredibly.

These observations highlight the community's shared desire for vital resources that will transform teaching methods and student development, and they operate as a road map for a future where technology empowers everyone and makes learning more inclusive.

- "We love interactive lessons, but we do not have the opportunity to have interactive lessons so often" P4CY.
- "I would like to use new software for my lessons not only GeoGebra which is quite old". P7CY
- "As a literature teacher I would like to be able to use some software to make my lesson more interactive, but I have not something in mind".
- "Pasco Interface is a software that can be extremely helpful during my lesson. I teach biology". P2CY

Finally when it comes to describing the sessions with one Word the participants said

Beneficial – P7CY, P8CY, P2CY, P3CY, P5CY
Coherent-P4CY
Cooperative-P3CY, P1CY, P6CY
Fascinating- P6CY
Intriguing- All participants (8/8)

**Mixed workshop 2**

The need of our workshop attendees was a unison demand for a revolutionary transition from conventional notebooks and textbooks to tablets, a more digitally accessible format. Their vision is based on the reality of this shift, realizing how difficult it is to carry around multiple heavy books every day for the various lessons. In Cyprus, where students frequently balance seven or eight subjects a day, the workload becomes an indisputable challenge. They see a shift to digital lessons that will not only lighten the workload but also provide them with the option to record classes, take screenshots of important information, and simplify their learning process. Surprisingly, everyone seemed to agree that tablets were great, but people seemed to think that interactive boards were not very useful.

Furthermore, robotics was one of the five topics that were put forward and all groups agreed that the students and teachers have not used it before and is new to these students. Their overwhelming enthusiasm for learning about robotics demonstrated their curiosity and openness to exploring new areas of knowledge. They were eager to further their knowledge in this field. The need for cutting-edge, diverse subjects that transcend traditional curriculum boundaries is highlighted by this widespread desire, which highlights the need for inventive and futuristic educational experiences.

- "Interactive boards are not so useful" P4CY.
- "When a teacher decided to have a lesson using the interactive board, we not only lose time, but there are also teachers that have no idea how to use it and they are asking for our help" P2CY.
- "As students the only exposure we have with Robotics is if we decide to have afternoon lessons". P3CY
- "Maybe robotics should be considered to be part of the curriculum especially since technology is evolving day by day" P7CY.
- "I agree about having new computers here at school. Students and teachers complain about the software being old and the computers extremely slow" P5CY.
- "We can become an eco-friendlier school by using more technology and printing less" P8CY.
- "I have friends in other schools that are allowed to take tablets at school and use them for their lessons instead of taking 6-7 different books and notebooks to school every day" P1CY.

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- "As an adult learner and a parent, I know that students indeed struggle a lot to carry around so many books, and since their books are available in digital form it can be a great idea to use tablets" P5CY.

The ideas and initiatives discussed included requiring all students to take ICT classes for a three-year period (until graduation), encouraging the development of Microsoft programs through specialized training, promoting the use of Google Search as a research tool, and encouraging creativity through the web development lessons. With the help of these programs, digital education is being strengthened and students are being given the tools they need to succeed in the current technological age.

- "The educational system in Cyprus lets us have computer lessons only the first year of our high school except if we decide to major. I would like to be able to have computer lessons all 3 years of high school" P1CY.
- "During covid we were given instructions to use teams which was given by the ministry of education. I would like to have some courses that will help me develop the other Microsoft programs" P4CY.
- "Learning how to create a website will be a good opportunity to develop our creative skills as well". P2CY
- "As teachers we believe that embedding google search, we can help our students learn how to do research, find the right bibliography" P7CY & P8CY

Finally when it comes to describing the sessions with one Word the participants said

Beneficial – P5CY, P7CY, P8CY

Functional – P5CY

Cooperative – P2CY, P6CY, P4CY

Enthusiastic- P4CY, P3CY

Intriguing- all participants

**Mixed workshop 3**

One of the paramount priorities for the community lies in the strategic investment and emphasis on training the trainers and educational staff. By providing training programs, they believe that the educators can be empowered with the latest teaching methodologies as well as the technology integration.

Simultaneously, a pivotal step towards modernizing their community and education involves transitioning from traditional textbooks to digital tablets. This shift not only aligns with the global trend towards digitalization but also offers a multitude of benefits such as interactive learning materials, real-time updates, and accessibility for diverse learning styles.

Moreover, addressing and revamping educational platforms that may be underperforming is crucial. This entails a comprehensive evaluation of existing systems, identifying areas for improvement, and implementing strategic changes to ensure optimal functionality. A streamlined, efficient educational platform is indispensable in facilitating seamless communication between educators, students, and parents, fostering a collaborative and supportive learning ecosystem.

Finally, investing in new equipment for school is imperative to create a conducive learning environment. Up-to-date resources, such as state-of-the-art laboratories, multimedia facilities, and interactive learning tools. By prioritizing these initiatives, the community can actively contribute to the transformation of its educational landscape, nurturing a generation of well-equipped, forward-

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thinking individuals ready to navigate the challenges of the future.

- "There is a need for new equipment, the computers, projectors and interactive boards are old and their resolution is really poor." P5CY
- "It would be ideal if there could be new equipment in all classrooms." P10CY & P11CY.
- "Teachers should be trained not only on the 5 technologies introduced by the project but also to do the basic things, such as using the computers and the other technologies the school has without our help." P2CY & P1CY
- "Personally, I do not like teams as a communication platform. I haven't used it ever since covid and online lessons were over. It is not complicated to use but it does require for safety reasons to change password every 3 months". P3CY
- "Having tablets instead of traditional books can be a revolutionizing change for schools in general especially in Cyprus". P5CY & P6CY

No ideas and initiatives involving the use of technologies have emerged, this is because the content itself at the moment needs to be explored. However, from an organizational point of view, it was proposed to consider sessions for the ICT courses that bring teachers and pupils together - in order to be able to deal with the use of technologies in the world of school together and also to strengthen the teacher-pupil bond.

- "The ideas already proposed from all 3 groups are more than enough I think". P4CY
- "We need to explore the content of the training ourselves and we can't wait to do so and learn more about the project" P10CY, P2CY, P7CY.

Finally when it comes to describing the sessions with one Word the participants said

Interesting – all participants

Interactive – P10CY, P9CY

Useful – all participants

Insightful – P1CY, P3CY,P6CY, P9CY

Collaborative -P7CY, P4CY

Well structured – P2CY, P1CY, P9CY,P10CY

Engaging – all participants

## Discussion and conclusions

The workshops conducted shed light on critical needs and aspirations within the community concerning digital technology. These insights underscore the importance of addressing specific requirements to enhance digital literacy and access across different groups: students, educators, and adult learners.

There are 3 key needs identified among the groups.

1. There's a unanimous need for updated equipment, including interactive boards, projectors, and computers, to enable more effective teaching and learning experiences.
2. Educators and adult learners seek comprehensive training programs to improve their digital skills, allowing for better integration of technology into teaching methodologies and daily tasks.

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3. A widespread desire exists to transition from conventional textbooks to digital tablets, providing easier access to educational resources and lightening the physical load for students.

There are also 3 key desires:

1. All groups expressed a strong desire for enriched learning experiences through the incorporation of advanced digital tools like 3D printing, coding, and robotics.
2. A common desire is for greater accessibility to digital tools and resources, facilitating a more inclusive and engaging educational environment.
3. Improved communication channels, both within the educational setting and for broader community engagement, were highlighted as a priority for utilizing technology effectively.

Specifically, students would like access to updated digital tools and a transition from physical textbooks to digital tablets for convenience and enhanced learning. Desire for more interactive learning experiences through the integration of advanced technologies like 3D printing and robotics.

Moreover, educators need a comprehensive training programs to improve digital proficiency and effective utilization of digital tools in teaching. Upgrade of existing equipment to facilitate interactive and engaging lessons. Desire for streamlined communication channels for better collaboration.

Finally, adult learners need digital literacy through structured training programs, especially in utilizing technology for everyday tasks like online payments. Desire for increased accessibility to digital tools and resources to stay updated with current technological advancements.

Overall, the identified needs and desires within the community emphasize the urgent requirement for technological upgrades, comprehensive training programs, and a shift towards digital platforms for an enriched learning and working environment. Addressing these needs will not only bridge the digital divide but also empower individuals across generations to thrive in an increasingly digital world. Moreover, aligning educational practices and resources with the evolving technological landscape can ensure that the community remains competitive and adaptable in a rapidly changing global context.

In order to thrive in the modern era, the community must embrace technology. Upgrading educational tools and fostering digital literacy among educators, students, and adult learners is crucial. By bridging the digital divide, the community sets the stage for inclusive, adaptable, and forward-thinking progress. This concerted effort not only equips individuals for success in a tech-driven world but also fosters a community that values continuous learning and innovation.

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