



# Implementation of the training courses on remote places

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# Introduction

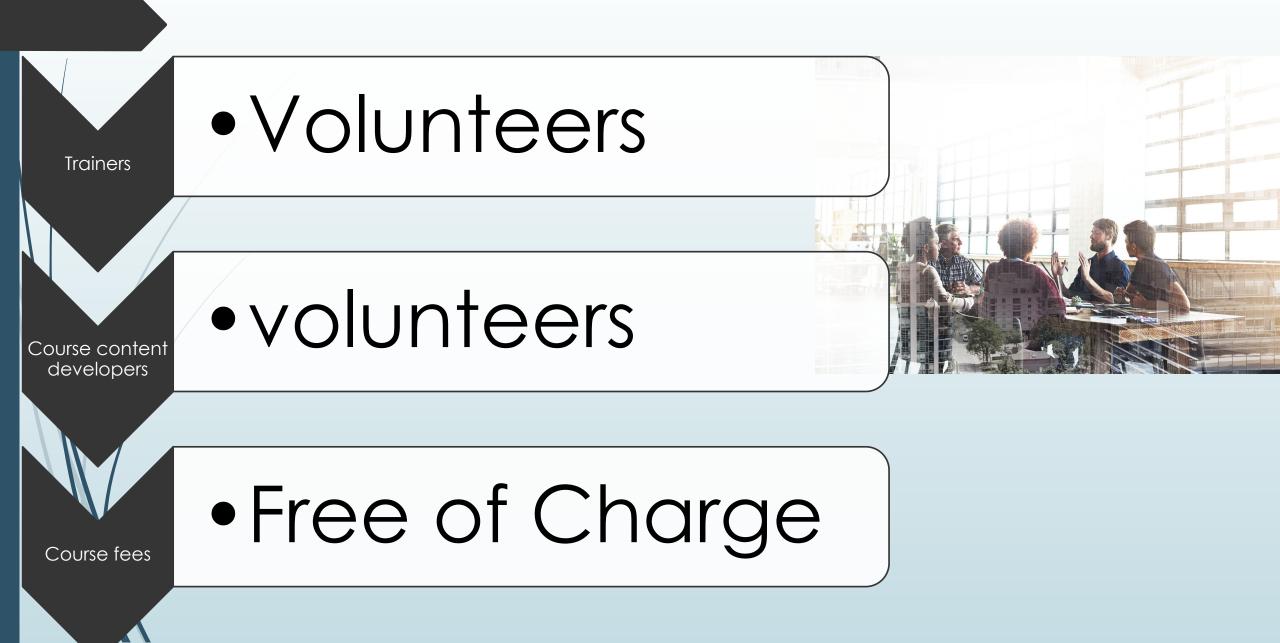
The entire activity, namely the training of teachers in ICT and their implementation in the classroom, started in 2010 supported by the Prefecture of the Cyclades islands, and more specifically by the Informatics and New Technologies Center of the prefecture.

From 2010 to 2013, the seminars were addressed to teachers of the prefecture of Cyclades. In the period 2013-2017, these seminars extended throughout the South Aegean. The next stage was their adoption by the Hellenic National Support Organization (NSO), which collaborates with the Ministry of Education (MERA[1]) and the Computer Technology Institute and Press "Diofantus"

In this Archipelagos, there are 62 inhabited islands, with 195 schools of primary education, 89 of lower secondary education, 30 of General higher secondary education and 26 vocational schools.



## **People involved**



## PROCEDURE

The course support team writes, posts, proofreads and updates the training materials, creates and coordinates the online classes, and resolves learner issues.

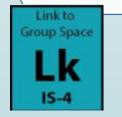
A team of trainers & graders (consisting of ~500 volunteer trainers), motivate the trainees and grade the activities they prepare. Every week the material of a new teaching unit is posted and the participants are asked to submit activities related to the respective unit. Two of the Global Elements for Effective Flipped Learning focus on the problem of lectures: Lecturer as Facilitator

Instruct on How

> Ih C-4

#### Planning for Flipped Learning

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# Successful completion

Course

content

 successful submission of at least 70% of assignments,



Read Research

Rr

R-1

Data

Cd

R-2 Action Research Ar R-3

Researchen

Rt'

 is co-shaped by the whole community through the completion of questionnaires

Previous trainees

New trainers



Training Material  remains permanently available for all trainees.

# Asynchronous part, Moodle platform

#### Synchronous part, Webex suite

Webex suite is provided to the teachers for free by the Greek Ministry of Education.

# Asynchronous part

Lower Blooms's	Learn Tech Tools	Focusion Group Space	Linkto Group Space	Appropriate Media	Pre Class has Big Idea	Short Media	Intuitive	Meaningful Tasks	Mix of Elements
Lb IS-1	<b>TI</b> 15-2	Gs IS-3	Lk IS-4	Am	Bi	<b>St</b> 15-7	In 15-8	<b>Mn</b> 15-9	Mx 15-10
Chonk Media	Practical Activities	Connect Prior Knowledge	Questioning Strategies	Accountability	Use Pre Class : Data	Teach to Interact	Consider Legal Aspects		
<b>Ch</b>	Pr	Pk	<b>Qs</b> 15-14	Ac	Dt IS-16	<b>Ti</b> 15-17	Lg		

Higher Because Hb GS-1	Char Espectations Ce GS-2	Eb GS-3	Threes Lecture NI GS-4	Student Contrastd SS GS-5	Collaboration Collaboration Cb GS-6	The second secon	Deferentiers	Lv GS-9	As the Strategies As GS-10	
Dental A Analog Dg GS-11	Createrst Createrst Cr GS-12	Rf GS-13	Prepulse Prepulse Rp* GS-14	Plan for Incomplete Pi GS-15						

#### Synchronous part

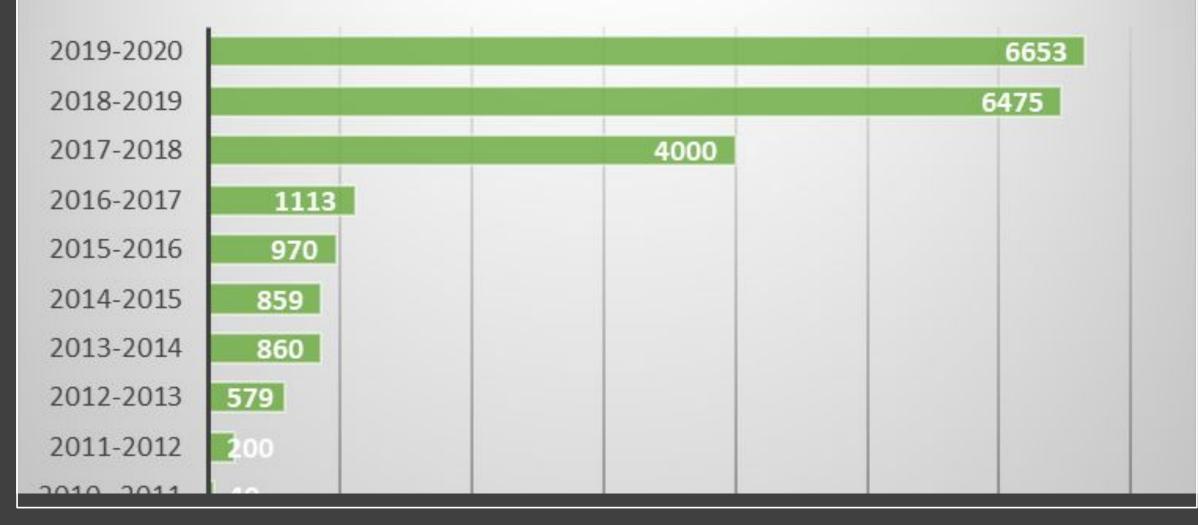


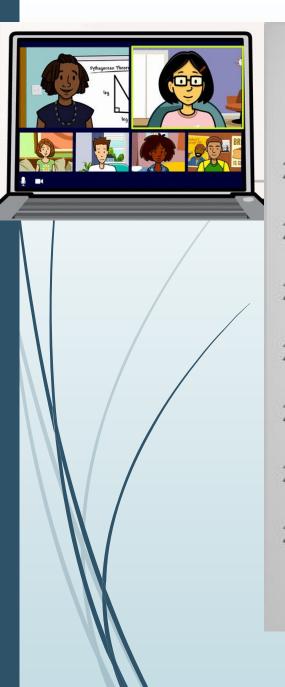
# Results

# Table 1. Number of e-classes and the number of the traineesregistered

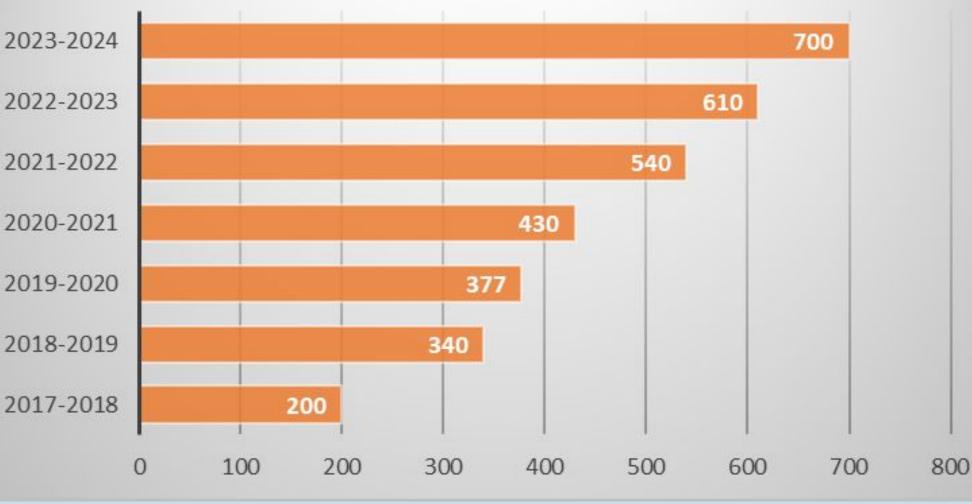
Training period	Registered teachers	No of e-classes
2019 - 2020	6653	377
2018 - 2019	6475	340
2017 - 2018	4000	200
2016 - 2017	1113	54
2105 - 2016	970	48
2014 - 2015	859	43
2013 - 2014	860	40
2012 - 2013	579	35
2011 - 2012	200	25
2010 - 2011	40	8
Total	21749	1170

# Number of trainees per year





#### Virtual classrooms per year



#### **Registrations per year**



#### Courses A

Summary of the distance learning courses provided by the Centre of Informatics and New technologies (KEPLINET)at Cyclades (2010 – 2017) and by the eTwinning (2017 – 2020)

#### **Course Title**

- 1. E-learning platforms Educational material production tools Communication tools
- 2. Multimedia editing tools Educational material production tools
- 3. Website Builder Tools Collaborative and Supportive Tools
- 4. Online educational communities and utilization of learning objects
- 5. Creative and safe internet Assessing and developing critical thinking about digital content
- 6. Utilization of mobile devices (Tablets and mobile phones) in teaching lessons
- 7. Scratch Programming and Educational Robotics
- 8. Educational robotics with Thymio
- 9. Educational robotics with Raspberry
- 10. Educational robotics with Arduino

#### Course Title



21. Distance training of students in small islands with the safe use of the internet - information evaluation, using a virtual world, OpenSim

22. Intersex relationships and the HPV virus

23. Training of ICT teachers in the Python programming language

24. Development of activities with the LAMS educational platform

25. Training of primary education teachers on Internet Safety using a virtual world, OpenSim

26. Using the interactive whiteboard in teaching, Openboard

27. Natural Sciences didactics

28. Network of schools for school mediation

29. Training of parents in the use of ICT (Naxos). Mixed F2F and distance learning

# Courses C

#### **Course Title**

#### 11. Distance trainer training

12. "Use of ICT and Web 2.0 tools in the teaching of Informatics I courses"

13. "Use of ICT and Web 2.0 tools in the teaching of Informatics II courses"

14. "Use of ICT and Web 2.0 tools in the teaching of Informatics III courses in Primary Schools"

15. "Use of ICT tools for science teachers"

#### 16. School Violence & Bullying

17. "Technical support of IT Laboratories using Virtual Machines

18. Use of Web 2.0 tools in teaching practice (Blended Learning with the use of a virtual world, OpenSim)

19. Use of UBUNTU Operating System, Libre Office & EL/LAK Applications in teaching

20. Training course for the Heads of School Laboratory of Informatics and Computer Applications, using Virtual Machines

# Discussion

Students who do poorly on the first quiz of the semester or who do not complete the first quiz of the semester are at high risk of not completing the course

From the students who completed the first quiz of the semester, 75.8% successfully completed the course

only 35.3% of the students who did not complete the first quiz, successfully completed the course Pre-Class Feedback

Fp

Feedback

Fg St-2

Explain

Eh

St-3

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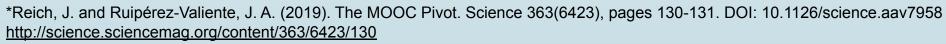
St-5

Feedback

Rg

Research indicates that low satisfaction degree of on-line courses affects the completion degree \*

Some researchers presented a 5-15% completion rate of online courses (\*\*), while others referred to 3-6% rate for Massive Open Online Courses . (\*).



Cognitive Needs C-5 ilure Equa Learning

\*\*Mason Matthew (2019). Why the completion rate for online courses are so low. Matthew Mason's Post on Linkedin (09/01/2021), available on <a href="https://www.linkedin.com/pulse/why-completion-rate-online-courses-so-low-matthew-mason/">https://www.linkedin.com/pulse/why-completion-rate-online-courses-so-low-matthew-mason/</a>.

\*Mason Matthew (2019). Why the completion rate for online courses are so low. Matthew Mason's Post on Linkedin (09/01/2021), available on https://www.linkedi n.com/pulse/why-c ompletion-rate-onli re-courses-so-low -matthew-mason/. **C** There are several reasons why the completion rate of self-paced online courses might be so low including \*

Lack of structure

•Without a set schedule or timeline, it can be easy for individuals to become distracted or lose motivation, which can make it more difficult for them to stay on track and make progress.



Learning

"

Explain

How

Eh

St-3

An St-5

Feedback

Rg

St-6

#### Limited interaction and support

Without the opportunity for regular in-person or online interactions with instructors or other students, individuals may feel isolated and may not have access to the same level of support and guidance as they would in a one-on-one or group coaching program.

# Limited accountability

• Self-paced online courses offer limited accountability. Without the structured support of a coach (or an accountability group), it can be easy for individuals to fall behind or lose motivation. This lack of accountability can make it more challenging for learners to stay on track and achieve their goals.

# Conclusion

The training model followed all these years (2020-2024) as it is described at the "methodology section, is considered to be successful because of:

The exceptional high degree of the course completion (63-84%, mean value 72% for the period 2022-2023)

The enthusiastic comments provided by the trainees during the evaluation, at the end of the course

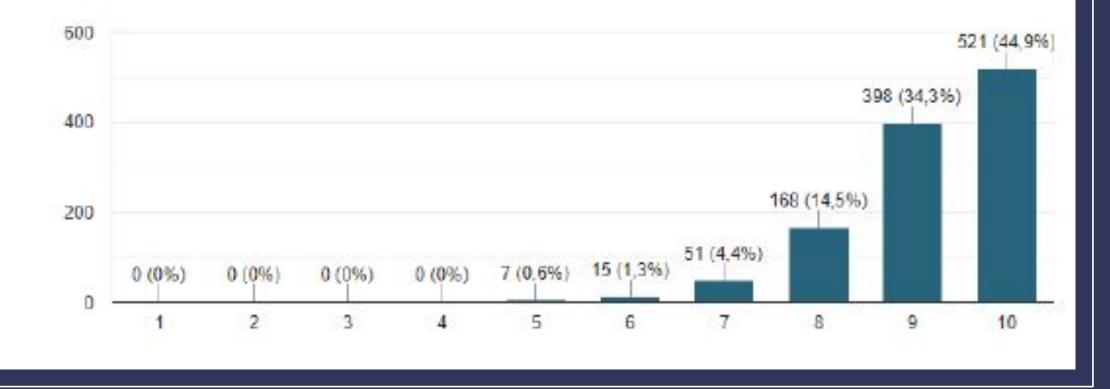


Table 3: data from the period 2022-2023, concerning the degree of successful course completion and the registered trainees' number

Course name	Completion percentage 2022-2023	Registration 2023-2024
Arduino Basic: Introduction to Educational Robotics Using Arduino	64%	632
I. E-learning platforms - educational material production tools - Communication tools	63%	2188
II. Media Editing Tools - Educational Material Production Tools	82%	2940
III. Website Builder Tools - Collaborative and Supportive Tools	68%	2392
IV. Online learning communities and the use of learning objects	65%	1249
Thymio	67%	153
V. Creative and safe internet - Assessing and developing critical thinking about digital content	66%	1009
/ Educational Robotics in Kindergarten - Beebot	84%	1044
Educational Robotics at School - Edison	67%	105
Mobile devices 1: Application in everyday life	78%	1078
Mobile devices 2: Application in education	69%	2461
Scratch Programming and Educational Robotics	74%	1211
Educational Robotics with Micro:bit (Pilot)	69%	340
Arduino Intermediate: Dive into educational robotics using Arduino	80%	253
Mean	72%	19740

#### Table 1: How do you evaluate this course (from 0-10)

#### 1.160 απαντήσεις



1.132 απαντήσεις

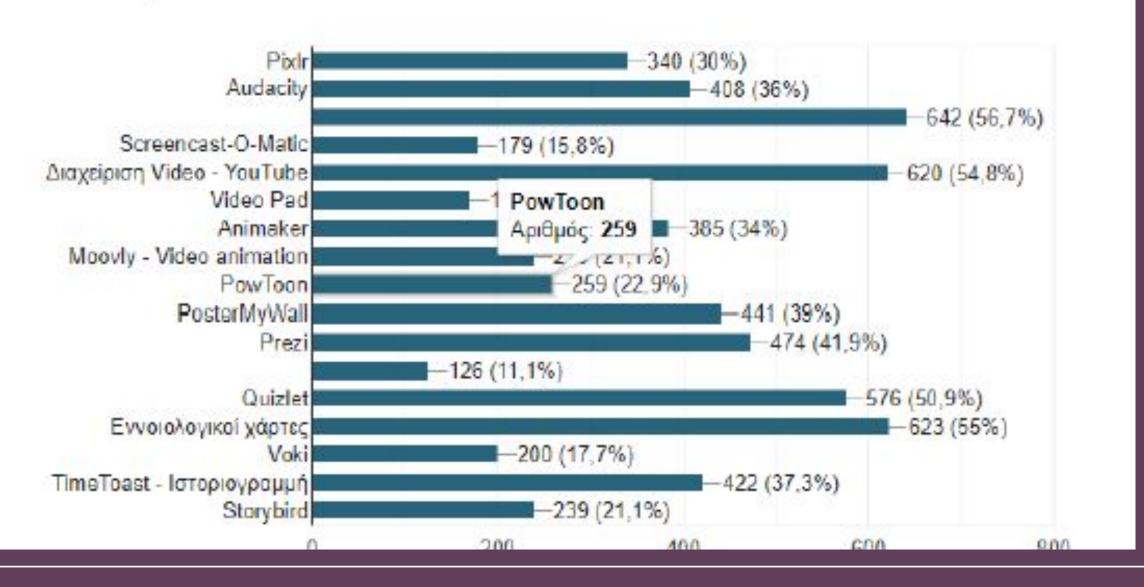
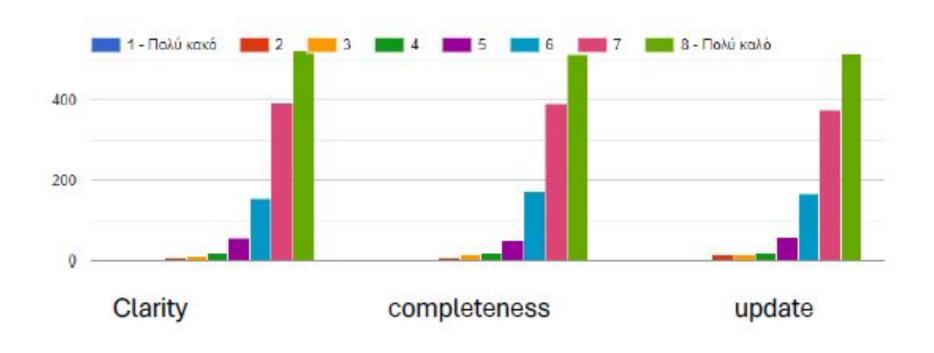
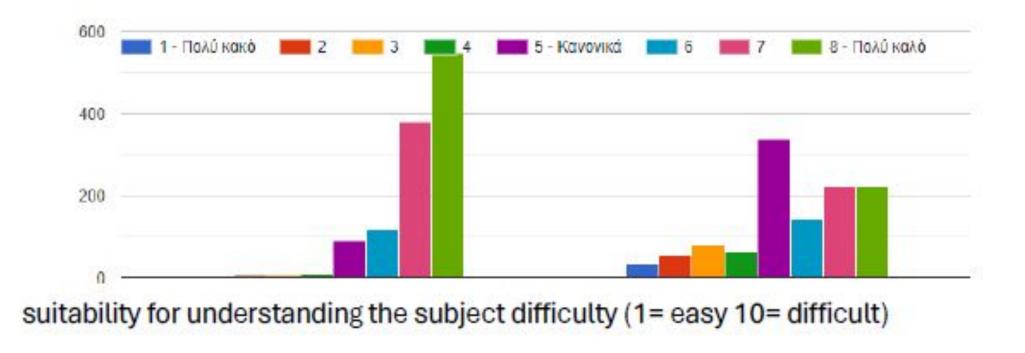


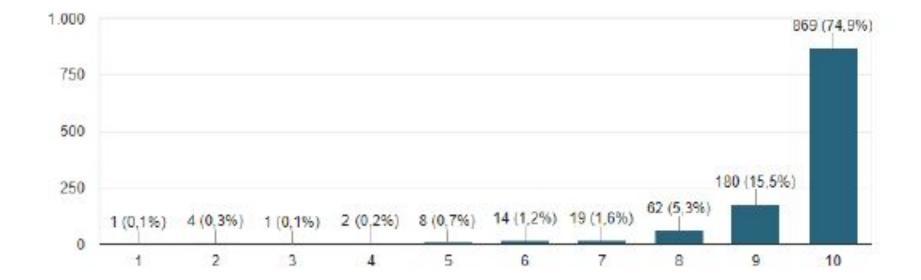
Table 3: How do you evaluate the course educational material concerning its.....



#### Table 4: How do you evaluate the course educational material concerning its...



#### Table 5: How consistent your trainer was in grading your activities



Source: Press release of eTwinning (2020) about the on-line courses the eTwinning Greece provided, during the 2019-2020 period. (available at: https://www.etwinning.gr/images/stories/deltio\_typou\_etwinning\_seminars\_2019\_2020.pdf

All these actions confirm the fact that **Communities of practice**, as they are presented in our courses, are the new frontier. SUCCESS

They may seem unfamiliar now, but in short, we vision *Communities of Practice* as a vital educational environment that can become a central part of the raining success, both in education and in business\*.

\*Wenger, Etienne C. & W. M. Snyder (2000). Communities of Practice: The Organizational Frontier, from the Magazine (January–February 2000), available on <a href="https://hbr.org/2000/01/communities-of-practice-the-organizational-frontier">https://hbr.org/2000/01/communities-of-practice-the-organizational-frontier</a>



# Thank you for your attention!!!