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# NET - New Approach in Educational Technology

Erasmus + Strategic Partnership

2019-1-SK01-KA201-060658

## REPORT: Analysis of Italian teachers' surveys on ICT supporting tools



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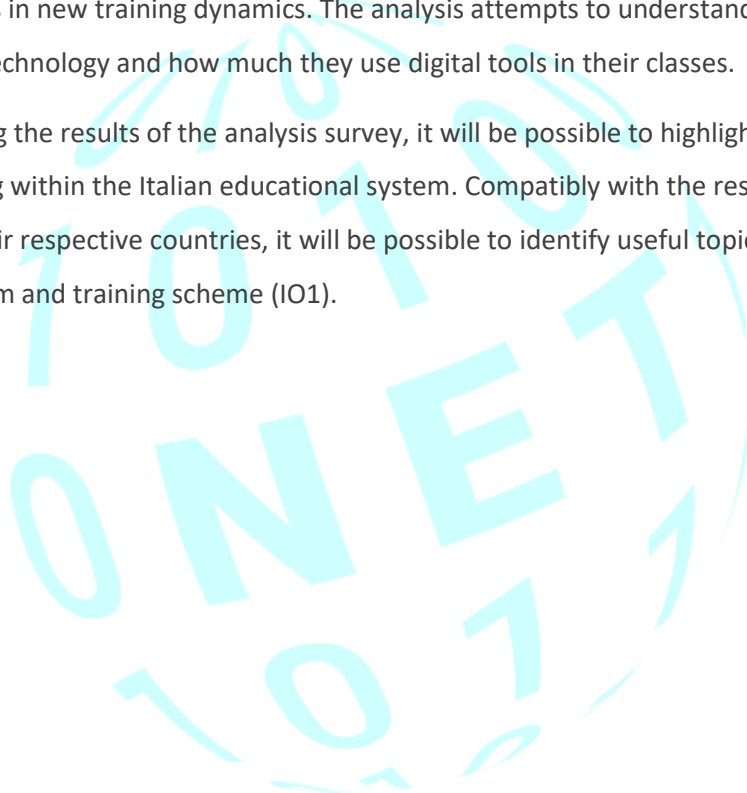
## ABSTRACT

In this report, the updated portrait on the current situation of ICT supporting tools used in some Italian schools, resulting from the analysis of the teachers' surveys results.

The survey is part the project NET- New Approach in Educational Technology, a European project funded in the frame of "Erasmus + Key Action 2- Strategic Partnership in the field of higher education".

It has been produced and distributed among 10 Italian teachers and aims to investigate the importance of information technologies in new training dynamics. The analysis attempts to understand how ready Italian schools are in terms of technology and how much they use digital tools in their classes.

By applying and analysing the results of the analysis survey, it will be possible to highlight the needs among all the personnel working within the Italian educational system. Compatibly with the results obtained by the other partners in their respective countries, it will be possible to identify useful topics draw up a list of courses for the curriculum and training scheme (IO1).



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## BACKGROUND DATA

The first part of the survey analyses personal and background data of the respondents.

The survey has been applied to 10 participants, 6 teachers from Bologna and 4 from Catania.

### 1 The name of your institution:

LICEO SCIENTIFICO UMBERTO I DI SAVOIA - CATANIA, ITALY
ICT SALVEMINI - CASALECCHIO DI RENO (BO), ITALY
IPSAR VERONELLI - BOLOGNA, ITALY
LICEO SCIENTIFICO UMBERTO I DI SAVOIA - CATANIA, ITALY
LICEO SCIENTIFICO P.UMBERTO I DI SAVOIA - CATANIA, ITALY
ITCS SALVEMINI - CASALECCHIO DI RENO (BO) ITALY
IPSAS ALDROVANDI RUBBIANI - BOLOGNA, ITALY
P.UMBERTO DI SAVOIA - CATANIA, ITALY
ITC GAETANO SALVEMINI - CASALECCHIO DI RENO (BO) ITALY
ITCS GAETANO SALVEMINI - CASALECCHIO DI RENO (BO) ITALY

There is a prevalence of women over men, with 60% of female respondents and 40% male.

### 2 Gender



40% (4)  
Male

60% (6)  
Female

1  
Standard Deviation

10  
Responses



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The average age of respondents is 54.8

### 3 Your age

65
53
46
60
65
43
48
65
54
49

The respondents are all teachers of upper secondary schools.

### 4 What is your career position in the institution?

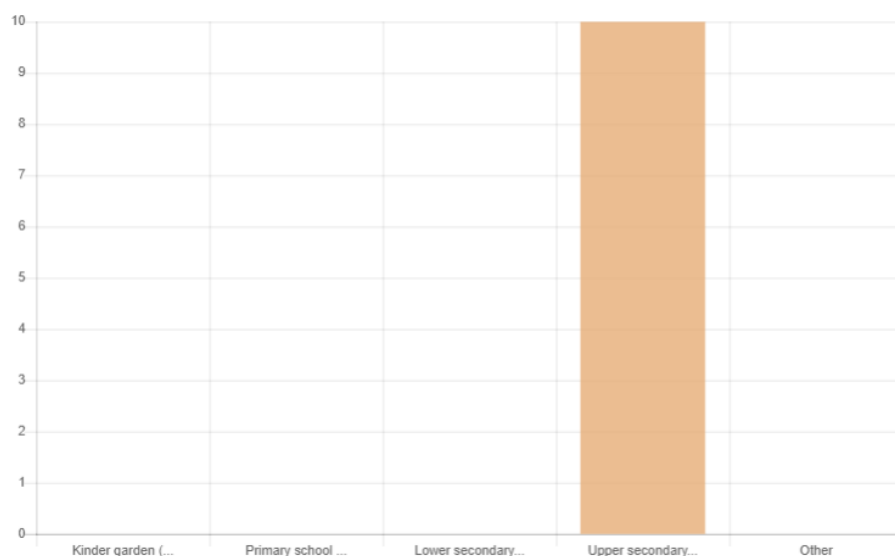
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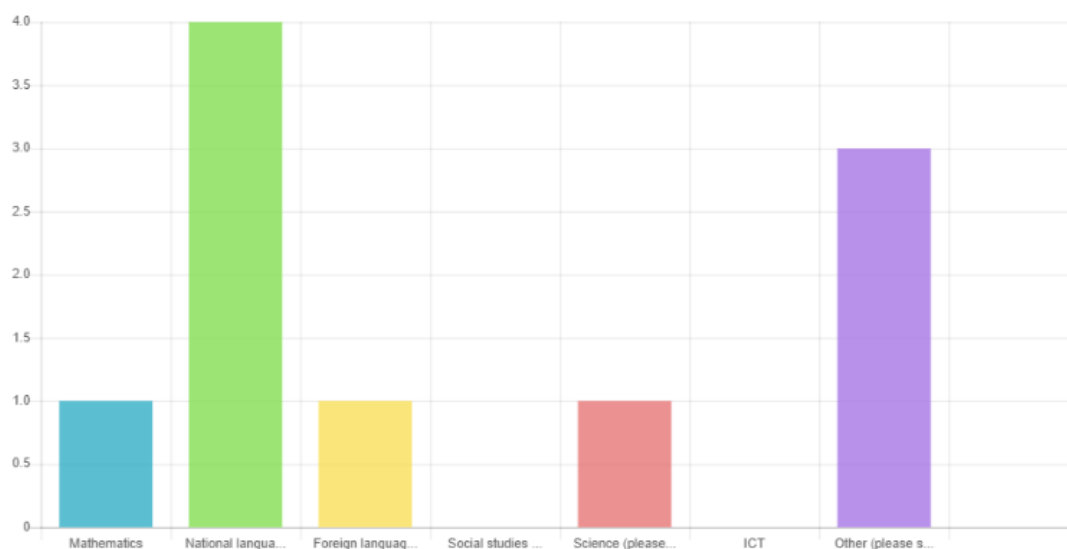


## 5 What school levels do you teach?



As for the teaching subject, 40% of respondents impart the National Language, while the rest teach mathematics, chemistry, English, history and 1 of them is a support teacher for disabled pupils.

## 6 What subjects do you teach?



10% (1) Mathematics	40% (4) National language	10% (1) Foreign language (please specify):	0% (0) Social studies (please specify):
10% (1) Science (please specify):	0% (0) ICT	30% (3) Other (please specify):	0% (0)



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## TECHNOLOGY EQUIPMENT

The second part of the survey aims to investigate the technology equipment of the schools.

According to respondents reply, it is not easy to calculate the average number of computer per students, but it is certainly less than one computer per student pair.

**7** How many computers are available at the institution for the students to use?

I DON'T KNOW
THERE ARE 5 INFORMATICS LABS AT SCHOOL
4
I DON'T KNOW
10
I DON'T KNOW
1 X CLASSROOM + THOSE OF THE INFORMATICS LABS
I DON'T KNOW
1 PER CLASSROOM + THOSE OF THE COMPUTER LAB
100

Only half of the respondents declare to have Ethernet access at school, while 90% of them are provided with WIFI network.

**8** Does the institution provide: Ethernet Internet access?



50% (5)  
YES

50% (5)  
NO

0  
Standard Deviation

10  
Responses

**9** Does the institution provide: Wifi network?



90% (9)  
YES

10% (1)  
NO

4  
Standard Deviation

10  
Responses



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Regarding the Learning management system (LMS), 60% of respondents' institutions have software applications for the administration, documentation, tracking, reporting, automation and delivery of educational courses, training programs, or learning and development programs. Instead, only 30% of the schools are equipped with Virtual learning environment (VLE).

**10** Does the institution have: Learning management system (LMS)?



60% (6)  
YES

40% (4)  
NO

1  
Standard Deviation

10  
Responses

**11** Does the institution have: Virtual learning environment (VLE)?



30% (3)  
YES

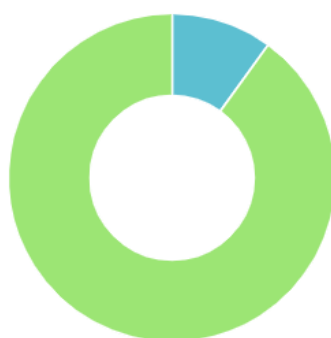
70% (7)  
NO

2  
Standard Deviation

10  
Responses

A negative figure can be seen in relation to virtual or augmented technology: only 10% of respondents declare to have such software's.

**12** Does the institution have: Virtual/augmented technology?



10% (1)  
YES

90% (9)  
NO

4  
Standard Deviation

10  
Responses

Respondents have named no other technology.

**13** Does the institution have: Other? 0%

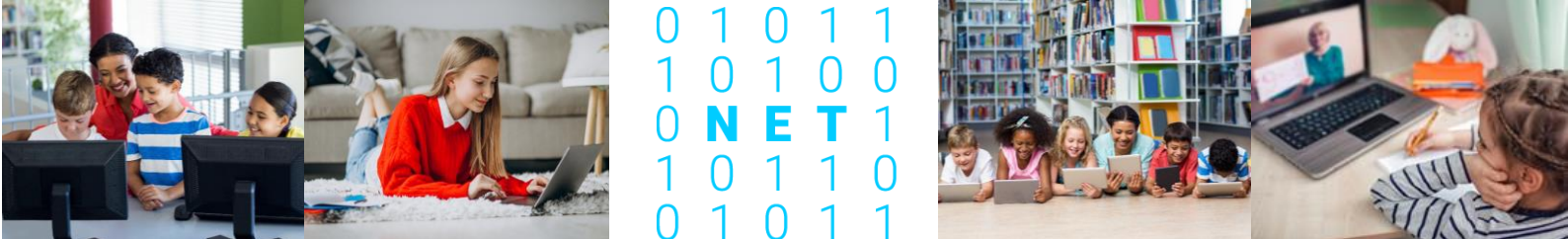


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From survey statements, it appears that more than 50% of teachers currently use digital technologies.

#### 14 What percentage of teachers currently use these technologies/tools?

I DON'T KNOW
90%
5%
I DON'T KNOW
10%
I DON'T KNOW
100%
I DON'T KNOW
100%
10%

It is interesting to highlight the level of distribution of digital tools in the classes:

- Personal computers are mainly available in some classrooms (40%) or under request (30%).
- Interactive whiteboards are used in all classrooms of northern Italian schools while they are available only in some classrooms of Sicilian institutions.
- Video conferencing systems, audio and photo equipment are available in half of the respondent institutions, mainly upon request or just in some classrooms.
- Video camera equipment and mobile phones are available in just over 20% of the respondent schools.
- Augmented reality or virtual reality software and equipment are not available at all.

#### 15 What kind of technological equipment is?







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Mobile phones



Augmented reality/Virtual reality



	In no classroom	In some classrooms	In all classrooms	Upon request	Standard Deviation	Responses
Personal computers	1 (10%)	4 (40%)	2 (20%)	3 (30%)	1.12	10
Interactive whiteboards	2 (20%)	4 (40%)	4 (40%)	0 (0%)	1.66	10
Video conferencing systems	5 (50%)	2 (20%)	1 (10%)	2 (20%)	1.5	10
Audio equipment (including software)	3 (33%)	5 (56%)	1 (11%)	0 (0%)	1.92	9
Digital photo cameras (including editing software)	4 (44%)	3 (33%)	0 (0%)	2 (22%)	1.48	9
Digital video cameras (including editing software)	7 (78%)	0 (0%)	0 (0%)	2 (22%)	2.86	9
Mobile phones	7 (78%)	0 (0%)	0 (0%)	2 (22%)	2.86	9
Augmented reality/Virtual reality	10 (100%)	0 (0%)	0 (0%)	0 (0%)	4.33	10

## TECHNOLOGICAL SKILLS

The third part of the survey investigates the technological skills of respondents by means of tools provided by the institutions for which they work.

In particular, teachers were asked if they have ever taken a technology-training course in the past 10 years offered by their schools and only 40% have provided a positive response. Among the courses: smart board, Moodle's, basic ICT concepts, ECDL, e-learning software, clouds, LIM, PNDS.

- 16** Has the institution got a training program in technology (using devices such as smart boards, augmented reality, creating videos, development of interactive learning content etc.) for teachers in the last ten years?



40% (4)  
YES

60% (6)  
NO

If yes, please specify.....

SMART BOARD, MOODLE, ETC.

PNDS, BASIC ICT COURSES

ECDL, E-LEARNING, BASIC INFORMATICS, CLOUDS, ETC

LIM COURSE

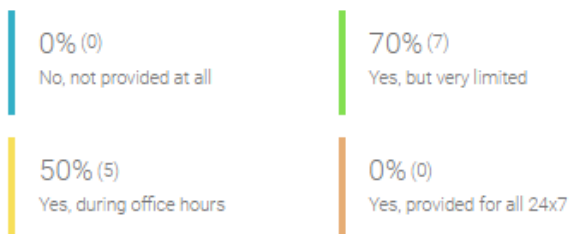
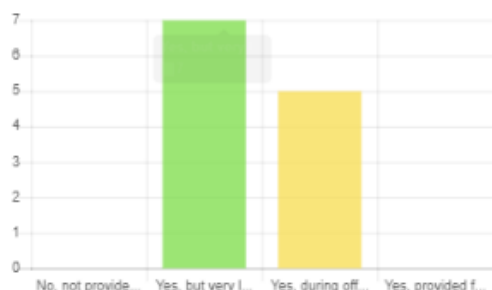


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Teachers receive limited technical support mainly during office hours

**17** Is technical support provided for teachers at your institution?



## PEDAGOGICAL SKILLS RELATED TO ICT

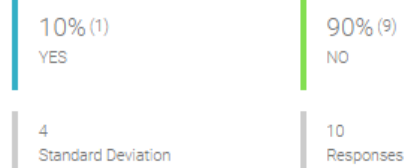
Finally, the last part of the questionnaire aims to understand the pedagogical skills related to information and communication technologies.

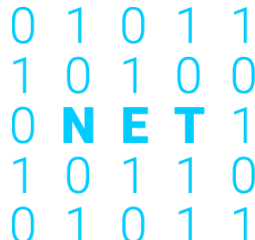
Unfortunately, only 40% of institution have a policy to promote or support ICT-based innovations by teachers in their teaching and only 10% have a special department dedicated to the pedagogical use of ICT.

**18** Does the institution have a policy to promote or support ICT-based innovations by teachers in their teaching?



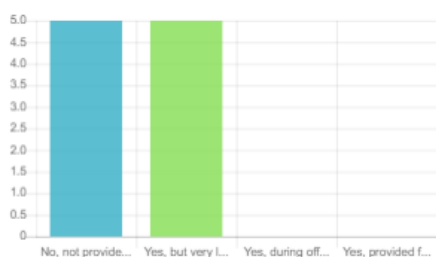
**19** Is there a special department dedicated to the pedagogical use of ICT at your institution?





The pedagogical support provided by institutions for their collaborators is inexistent (50%) or very limited (50%) and pedagogical competences related to ICT use is a component that in 90% of cases does not affect the selection and recruitment of staff.

**20** Is pedagogical support provided for teachers at your institution?



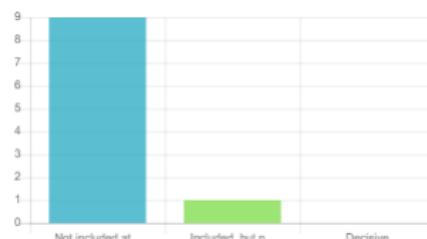
50% (5)  
No, not provided at all

50% (5)  
Yes, but very limited

0% (0)  
Yes, during office hours

0% (0)  
Yes, provided for all 24x7

**21** Do the recruitment procedures for new teachers include an assessment of their pedagogical competences related to ICT use?



90% (9)  
Not included at all

10% (1)  
Included, but not decisive

0% (0)  
Decisive

On the basis of the information collected and in order to align professors' skills with European standards, it is relevant to deepen their knowledge of issues related to:

- virtual and augmented reality, both in terms of software and practical tools of use;
- use of e-learning technologies and interactive lessons (especially following the covid-19 pandemic) through games, quizzes, simulations, cooperative environments, 3d animations;
- green computing as a new sustainable study method that innovates and does not pollute;
- basic coding to create website, platform or applications.



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