CLICK

CONTEMPORARY LITERACY IN CONTEMPORARY KIDS

CFPIMM

Erasmus+

DIGITAL AND TECHNOLOGY LITERACY

1st LEARNING, TEACHING OR TRAINING ACTIVITY

Lordelo - Portugal

February/2016

Project nº: 2015-1-EE01-KA219-0134561

1. Contemporary Kids in Digital and Technological World

2. Digital and technological reality *versus* learning proficiency

3. Digital and technological literacy? What is about?

4. Fostering components of digital literacy

5. Digital literacy planning tool (incorporating digital literacy in everyday teaching)

Information and communication technology (ICT) has revolutionised virtually every aspect of our life and work. Students unable to navigate through a complex digital landscape will no longer be able to participate fully in the economic, social and cultural life around them.

And Teachers?

"Students, Computers and Learning", OCDE, 2015

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

COUNTRY	HOME ICT EQUIPMENT (%)		TIME SPENT USING THE INTERNET (minutes)		
	Students with at least 1 computer	Students with 3 or more computers	Outside of school, on Weekdays	Outside of school, on weekend days	At school, on weekdays
	99,9	84,7	136	177	46
	98,5	37,3	138	170	23
	97,1	36,6	99	149	24
	87,1	8,7	-	-	-
	97,9	37,9	107	149	34
	70,7	4,1	52	78	15

(Data base OCDE, 2012)

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

***About Internet use*:**

- Browse the Internet for fun
- Download music, films, games or software from the Internet
- Chat on line
- Use e-mail
- Play one-player games
- Play collaborative online games

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

Contemporary kids

+

Digital and Technological World

=

Internet (ab)**use**

?

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

Positive impact of Internet use:

- Positive tool for student learning
- Youth empowerment
- Improvement of test scores
- Using digital tools for learning
- Motivation to learn
- Access to information (anonymous format)
- …

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

Negative impact of Internet use:

- Internet addition (Internet compulsive use)
- Potentially lower grades
- Reduced sleeping hours
- Lack of physical exercise
- Mental health in risk (depression)
- Online risks (cyberbullying, sexual harassment…)
- …

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

Young people are “digitally native”?

- Growing up in a digital culture?

- Developing technological and digital skills?

Parents and teachers are “digitally immigrants”?

Is that so?

1. CONTEMPORARY KIDS IN DIGITAL AND TECHNOLOGICAL WORLD

Young people **are not** so knowledgeable as it seems…

- Knowing about new technologies
- Researching skills for relevant information
- Critical and creative thinking
- Copy and past syndrome
- Understanding of the rehabilitee of sources

?

But…

Do more computers make **students** better learners?

Do more computers make lessons and **teachers** more effective?

And the **teachers**, if they are **not *in***, **are *out***?

2. DIGITAL AND TECHNOLOGICAL REALITY *VERSUS* LEARNING PROFICIENCY

COUNTRY	ICT USE AT AND FOR SCHOOL (%)			
	Number of students per computer	Students using computer at school	Students browsing Internet for schoolwork at least once a week	
			At school	Outside school
	2,4	86,7	80,8	74,3
	2,1	61	28,9	64
	3,7	69	38,1	67,4
	4,6	-	-	-
	2,2	73,2	51,1	61,9
	44,9	48,7	28	50,2

(Data base OCDE, 2012)

2. DIGITAL AND TECHNOLOGICAL REALITY *VERSUS* LEARNING PROFICIENCY

"Productivity paradox" (Robert Solow, Nobel Laureate)

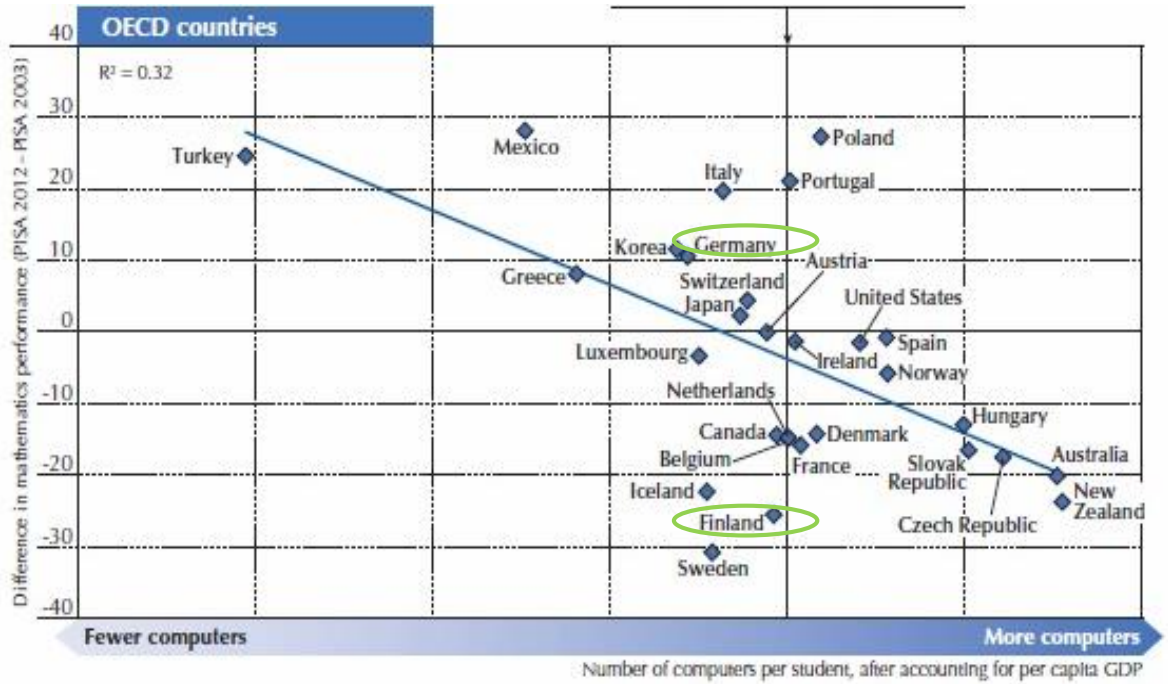
- New and potentially very worrying "productivity paradox" across both member and non-member countries: a strong correlation over the period 2009 to 2012 ***between increased spending on computers in schools and decreased performance in students***.

"Students, Computers and Learning", OCDE, 2015

2. DIGITAL AND TECHNOLOGICAL REALITY *VERSUS* LEARNING PROFICIENCY

Figure 6.3

Trends in mathematics performance and number of computers in schools



Note: The horizontal axis reports residuals from a regression of the student-computer ratio on per capita GDP (both variables are measured in logarithms).

Source: OECD, PISA 2012 Database, Table I.2.3b (OECD, 2014), Table IV.3.2 (OECD, 2013) and Table 2.11.

StatLink http://dx.doi.org/10.1787/888933253262

(Data base OCDE, 2012)

2. DIGITAL AND TECHNOLOGICAL REALITY *VERSUS* LEARNING PROFICIENCY

MEMO:

- Resources invested in ICT for education are not linked to improved student achievement in reading, mathematics or science.
- In countries where it is less common for students to use the Internet at school for schoolwork, students' performance in reading improved more rapidly than in countries where such use is more common, on average.
- The relationship between computer use at school suggests that limited use of computers at school may be better than no use at all, but levels of computer use above the current OECD average are associated with significantly poorer results.

("Students, Computers and Learning", OCDE, 2015)

2. DIGITAL AND TECHNOLOGICAL REALITY *VERSUS* LEARNING PROFICIENCY

Resolving Solow's paradox:

It's not *how much* you spend,

but *when and how* you spend it

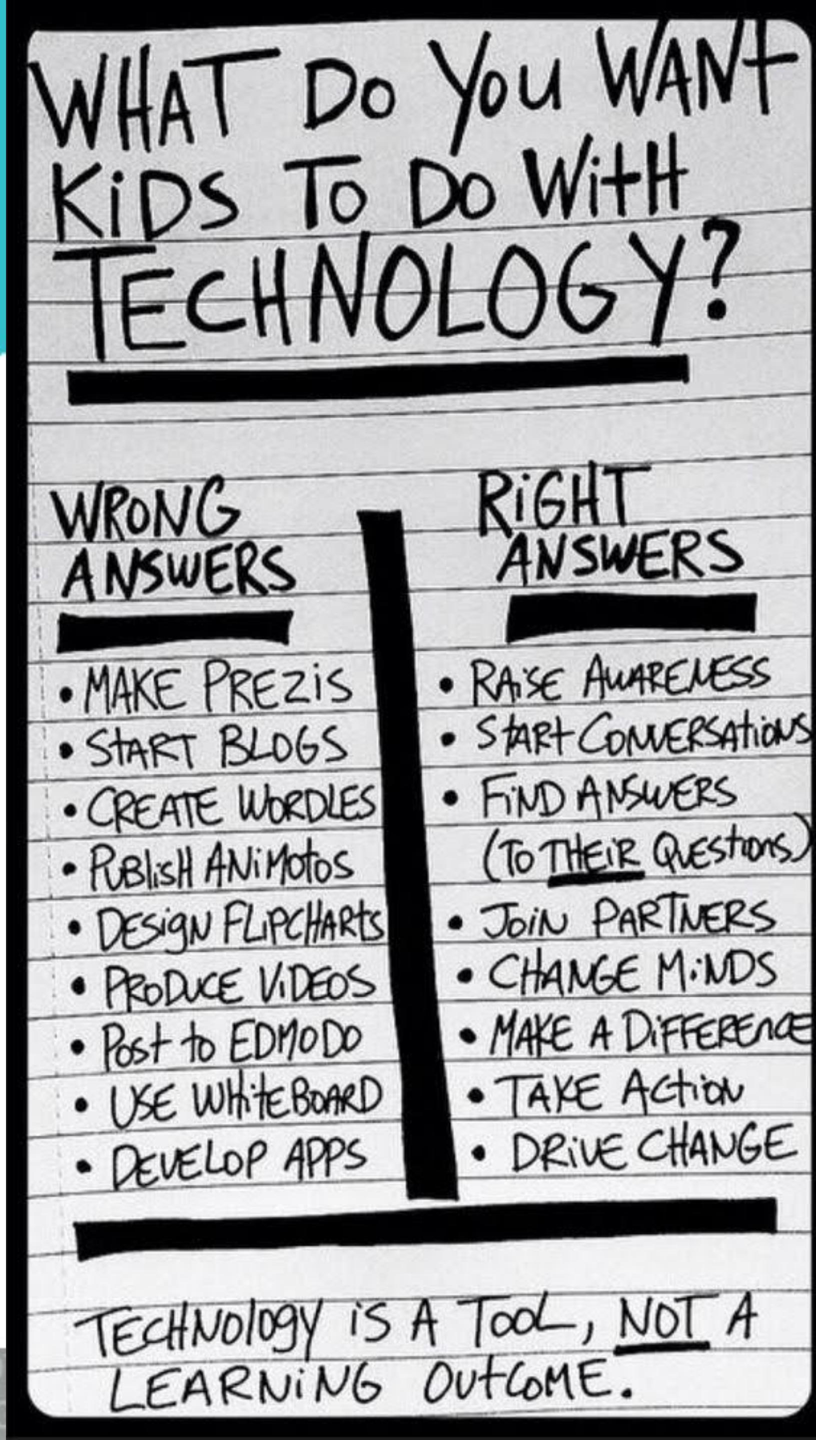
that counts.

Developing digital and technology LITERACY!

Digital literacy:

- ***Skills***, ***knowledge*** and ***understanding*** that ***enables critical, creative, discerning and safe practices*** when engaging with digital technologies in all areas of life.

- Digital literacy integrates technology literacy.

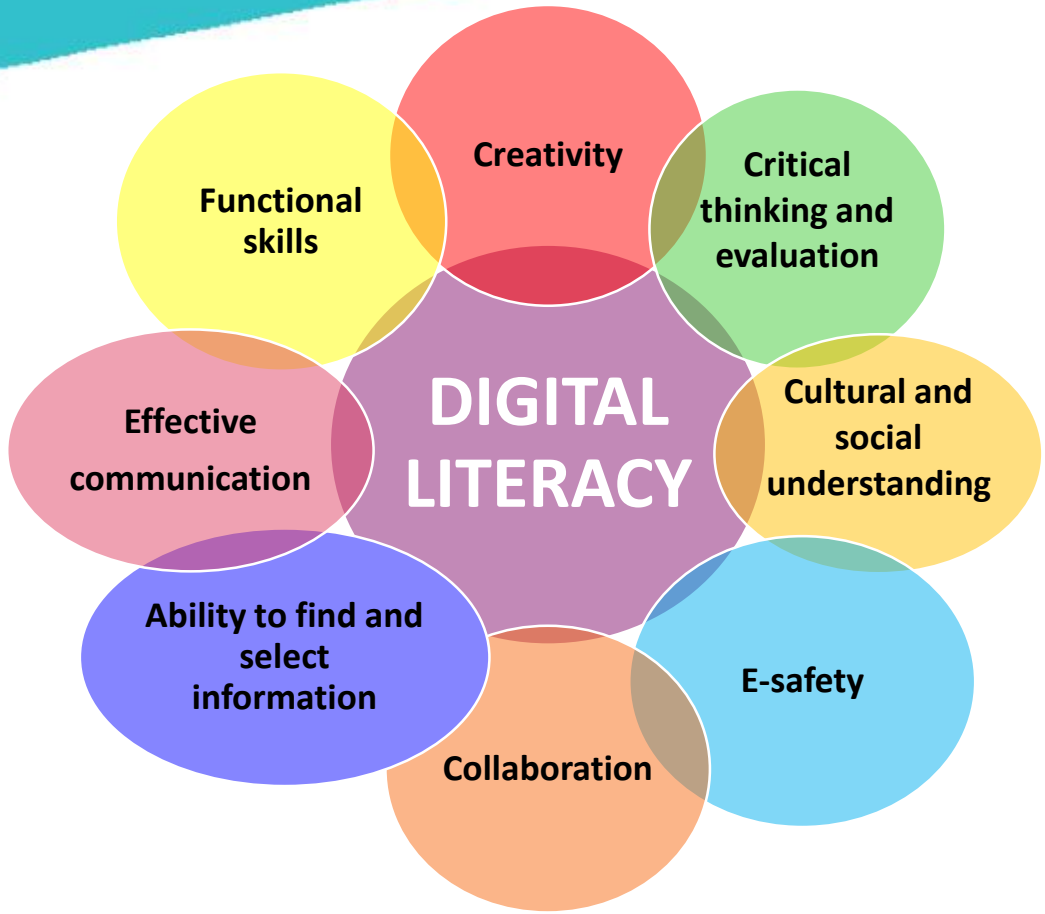

WHAT DO YOU WANT KIDS TO DO WITH TECHNOLOGY?
WRONG ANSWERS
• MAKE PREZIS
• START BLOGS
• CREATE WORDLES
• PUBLISH ANIMOTOS
• DESIGN FLIPCHARTS
• PRODUCE VIDEOS
• POST TO EDMODO
• USE WHITEBOARD
• DEVELOP APPS
RIGHT ANSWERS
• RAISE AWARENESS
• START CONVERSATIONS
• FIND ANSWERS (TO THEIR QUESTIONS)
• JOIN PARTNERS
• CHANGE MINDS
• MAKE A DIFFERENCE
• TAKE ACTION
• DRIVE CHANGE
TECHNOLOGY IS A TOOL, NOT A LEARNING OUTCOME.

3. DIGITAL AND TECHNOLOGY LITERACY? WHAT IS ABOUT?

- Understanding Digital Literacy should not begin with technology or digital tools.

- Understanding cultural and social issues, critical thinking and being creative is much more than working with technology and digital tools and comes before.

4. FOSTERING COMPONENTS OF DIGITAL LITERACY



4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Functional skills

- Be able to use computer or other technology or software effectively.

Do they kids and teachers have it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Creativity

- Creativity is more than artistic ability, is also how we think and how we construct and share knowledge.

Do they kids and teachers know how to be creative?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Critical thinking and evaluation

- Capacity to receive information or meaning, but also contributing to it, analysing it and shaping it.

Do they kids and teachers have it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Cultural and social understanding

- People exist in different cultures and networks and experience multiple interactions with others.

Do they kids and teachers have it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Effective communication

- Awareness of creating something for someone else, consider the needs of particular audiences and communicate ideas with clarity and lucidity.

Do they kids and teachers have it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Ability to find and select information

- Find and select reliable and relevant information.

Do they kids and teachers have it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

- Learning involves dialogue, discussion and building on each other's ideas to create shared understandings.

Do they kids and teachers know it?

4. FOSTERING COMPONENTS OF DIGITAL LITERACY

Flag it!

Zip it!

Block it!

E- safety

- To be aware of age appropriate contents, concern about predatory behaviour of adults, cyber-bullying, plagiarism, copyright and virus protection.

Do they kids and teachers know it?

5. DIGITAL LITERACY PLANNING TOOL

How can they teachers bring all the elements of Digital Literacy in their subject teaching?

1. Defining
2. Finding
3. Evaluating
4. Creating
5. Communicating

Digital Literacy Planning tool for everyday teaching

5. DIGITAL LITERACY PLANNING TOOL

1. DEFINING

- Defining a task, activity or question.

2. FINDING

- Researching skills, find and select information.

3. EVALUATING

- Critical thinking.

4. CREATING

- Thinking creatively for the purpose of the output.

5. COMMUNICATING

- During process, students communicate with teacher, with each other and with the audience.

"The best teachers are those who show you where to look, but don't tell you what to see."

Alexandra K. Trenfor