



The New Millennium Learners

Francesc Pedró









# WHAT'S THE PROBLEM WITH NML?







## **Overarching issues**

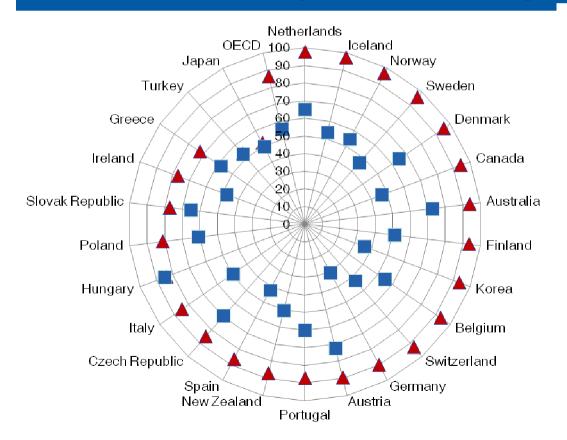
 Are the NML a relevant phenomenon for educational policy-making?
 Are our claims and analysis based on evidence?

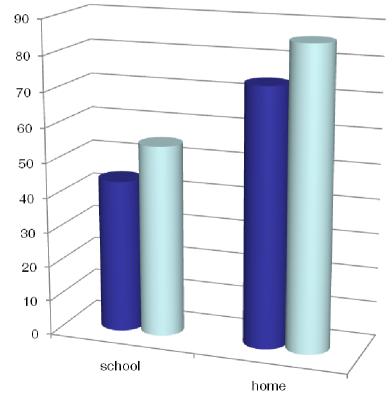




#### The relevance of NML

#### • Technology is shaping their lives...







# WHAT DOES RESEARCH EVIDENCE TELL US?



#### **Cognitive skills development**

•Visual-spatial skills
•Non verbal intelligence
•Lack of evidence in other areas

# Social values and lifestyles

- Media competition
- Socialisation in the third space
- •Importance of videogames as threshold lowerers:
  - Stereotypes
  - •Violence/agression/authority



Forensics

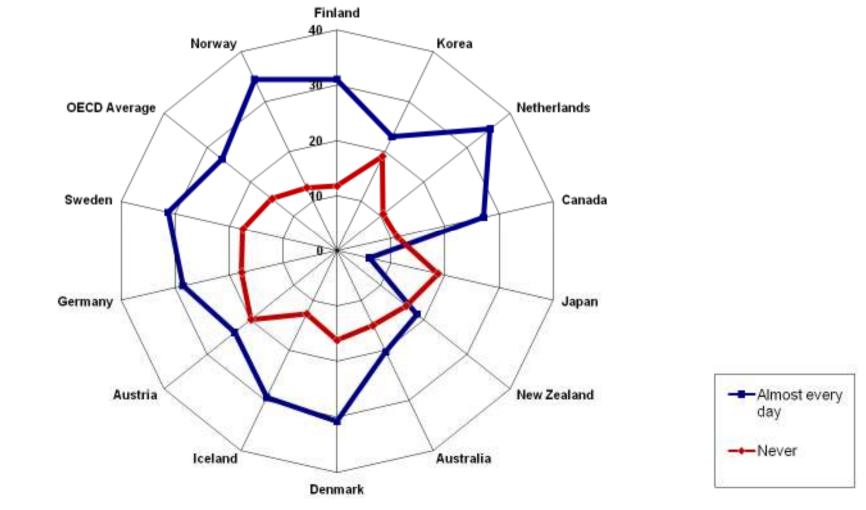
PlayStation 31-PS GameCribe - PSP 105 GameDoy Advance - PC

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# Play Games PISA 2006



#### **Cognitive skills development**

•Visual-spatial skills
•Non verbal intelligence
•Lack of evidence in other areas

# **Educational** achievement

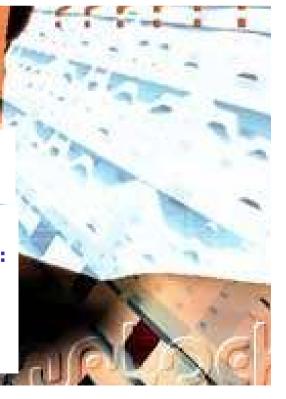
No conclusive evidence
Lack of appropriate methodologies:

Large longitudinal studies
Large-scale experiments

Unexplained phenomena

# Social values and lifestyles

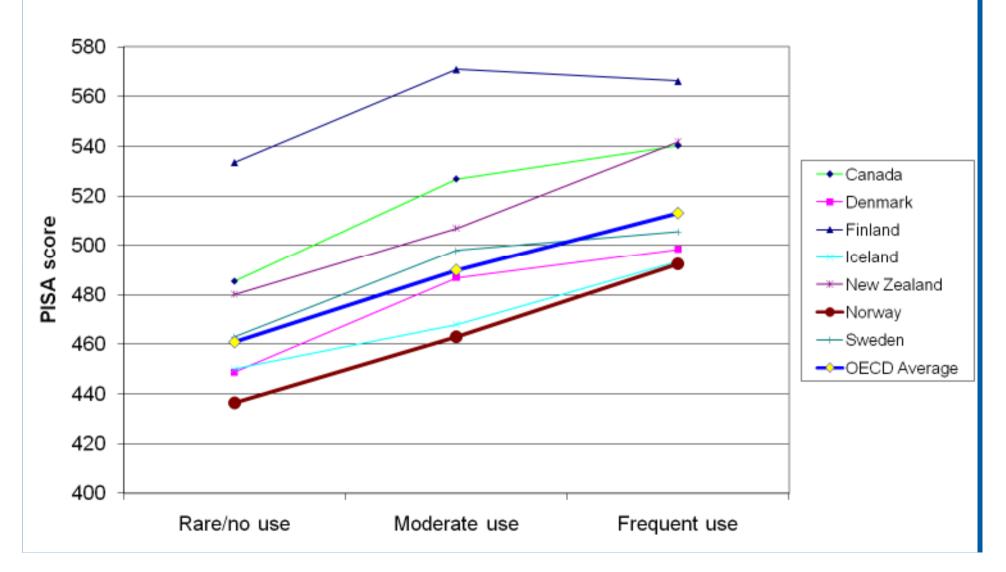
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#### Use of PC at home – science PISA 2006

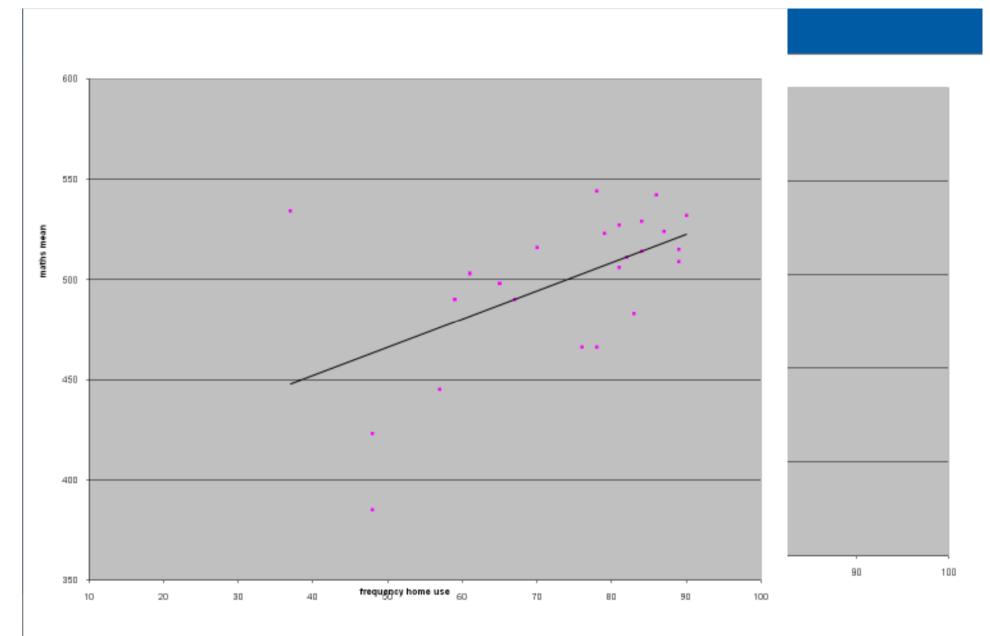




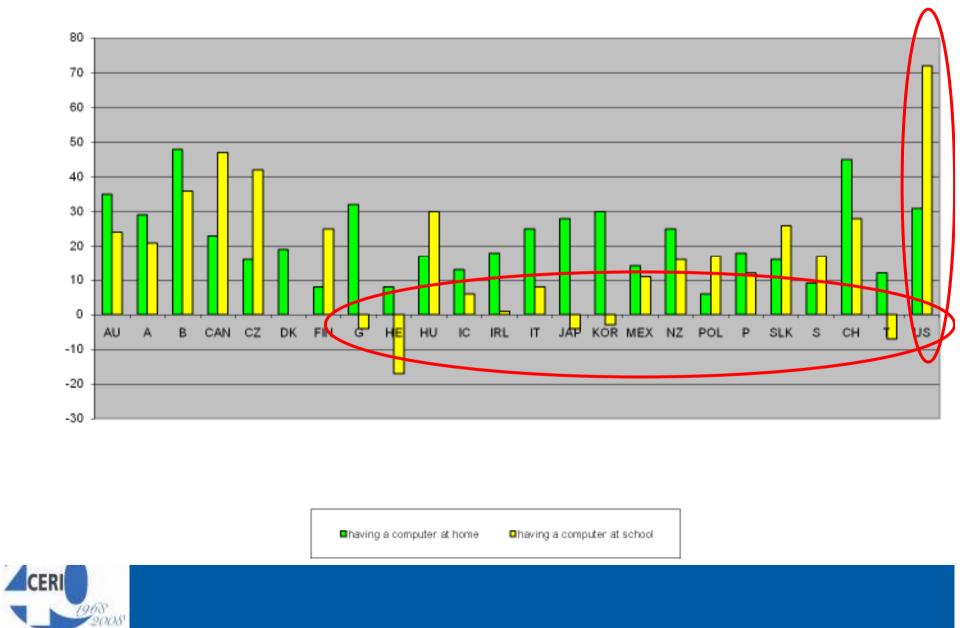


 Almost every day 570 -D- Country PISA score Ť ▲ Once or twice a week 550 × Few times a month X \* Once a month or less 530 Never **PISA** score 510 П 490 470 Finland Netherlands Lealand Carada Nizitalia Japan Cernant Iceland Zweden Dennant Mizitia Norman Average OFCO Average toles

Play games









## WHAT RESPONSES SO FAR?

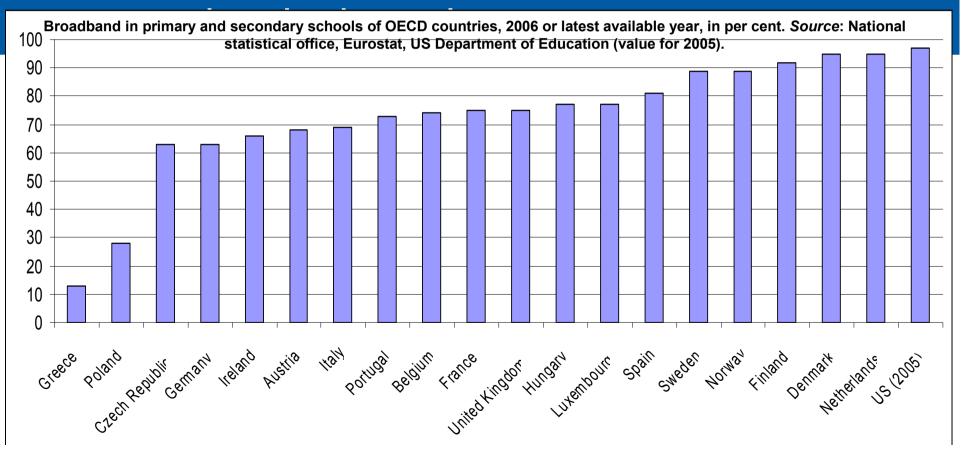






# How have schools responded?

#### Still struggling with the issue of lack of







## What have governments done?

- At school level:
  - Infrastructures and equipment
- At teachers level:
  - In-service teacher training
  - Digital tools and contents
  - But no incentives
- At pupils level:
  - XXI Century competencies
  - On-line Bullying and Safety





## It goes beyond safety



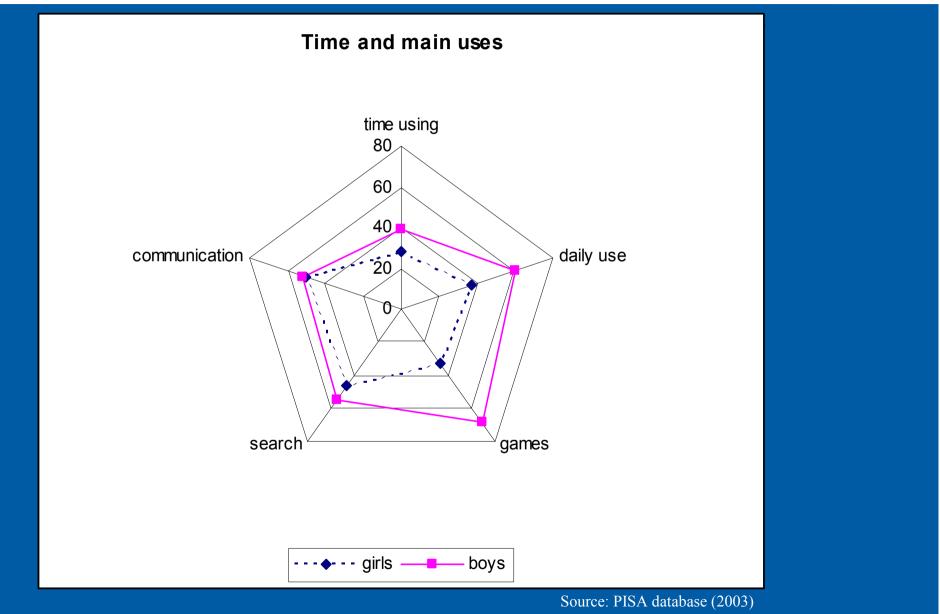


## THE PENDING AGENDA













# Should NML be a source of concern for governments?

- Gender divide:
  - Stereotypes
  - Do girls really fall behind?
- Matthew effect:
  - A second digital divide

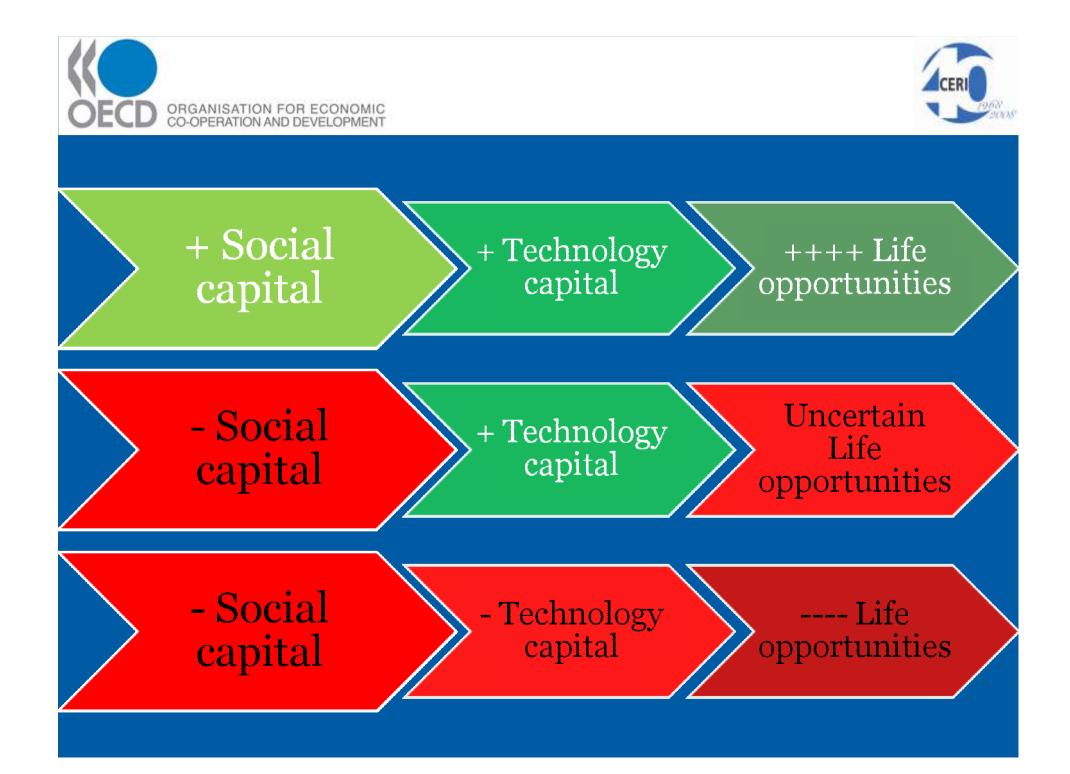




#### Inequalities in internet use

	Internet use: educational purposes*			et use: urposes*	
	Even(D)	%		%	
	Exp(B)	Change	Exp(B)	Change	
Their parents' frequency of use					
Never or hardly ever					
Monthly	1.093	+9.3%	1.092	+9.2%	
Weekly	1.249	+24.9%	1.032	+3.2%	
Daily	1.270	+27.0%	1.090	+9.0%	
	*Signific	ant relation	ships are	marked in bolds.	

#### The more frequent users their parents are, the greater the likelihood of young people using the internet for educational purposes







# Should NML be a source of concern for governments?

- Gender divide:
  - Stereotypes
  - Do girls really fall behind?
- Matthew effect:
  - A second digital divide
- They aren't objects!
  - They have things to say



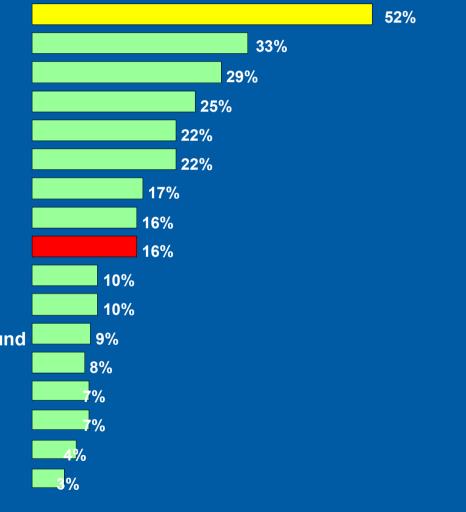
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#### **Common classroom activities**

Which three of the following do you do most often in class?

Copy from the board or a book Listen to a teacher talking for a long time Have a class discussion Take notes while my teacher talks Work in small groups to solve a problem Spend time thinking quietly on my own Have a drink of water when I need it Talk about my work with a teacher Work on a computer Listen to background music Learn things that relate to the real world Have some activities that allow me to move around Teach my classmates about something Create pictures or maps to help me remember Have a change of activity to help focus Have people from outside to help me learn Learn outside in my school's grounds



Base: All pupils (2,417)

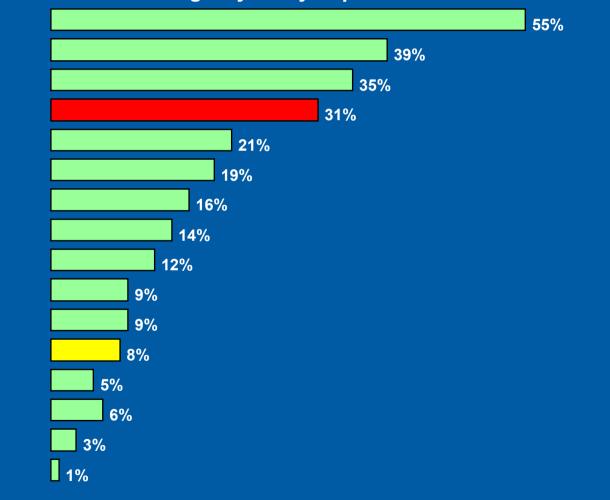
Source: Ipsos MORI





#### Most preferred ways to learn In which three of the following ways do you prefer to learn?

In groups By doing practical things With friends By using computers Alone From teachers From friends By seeing things done With your parents By practising In silence By copying At a museum or library By thinking for yourself From others Other







### Lessons learned

- Missing relevant research, not cumulative
- Empirical research focused on the negatives
- Lack of large-scale experiments and longitudinal studies
- What research is telling, does not get to teachers or parents



## WHAT NEXT?







### **Drawing on evidence**







#### **Grazie mille!**

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