

NATIONAL CONFERENCE



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"Using mobile devices in education in European countries"

Experiences from 1:1 studies and
the Creative Classrooms Lab
project



What you will hear today?



- 1:1 initiatives across Europe
- Early tablet initiatives
- Outcomes, difficulties, sustainability
- European policy experimentation on the use of tablets:
The Creative Classrooms Lab project



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Mobile learning- key actors



UNESCO

- **Mobile learning** is learning anywhere, anytime through the use of mobile technologies. It also includes administration and management support.
- **Broad definition** of mobile devices: tablets, mobile phones, e-readers, portable audio players, hand-held gaming consoles, etc.

WORLD BANK

- Blog- International monitoring, developing countries

EUROPEAN SCHOOLNET

- 1:1 computing initiatives vs 1:1 **learning initiatives**



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Mission



- Action projects for pilot testing and capacity building
- Conducting research and disseminating knowledge
- Providing guidance to Ministries of Education educational authorities, headteachers and teachers



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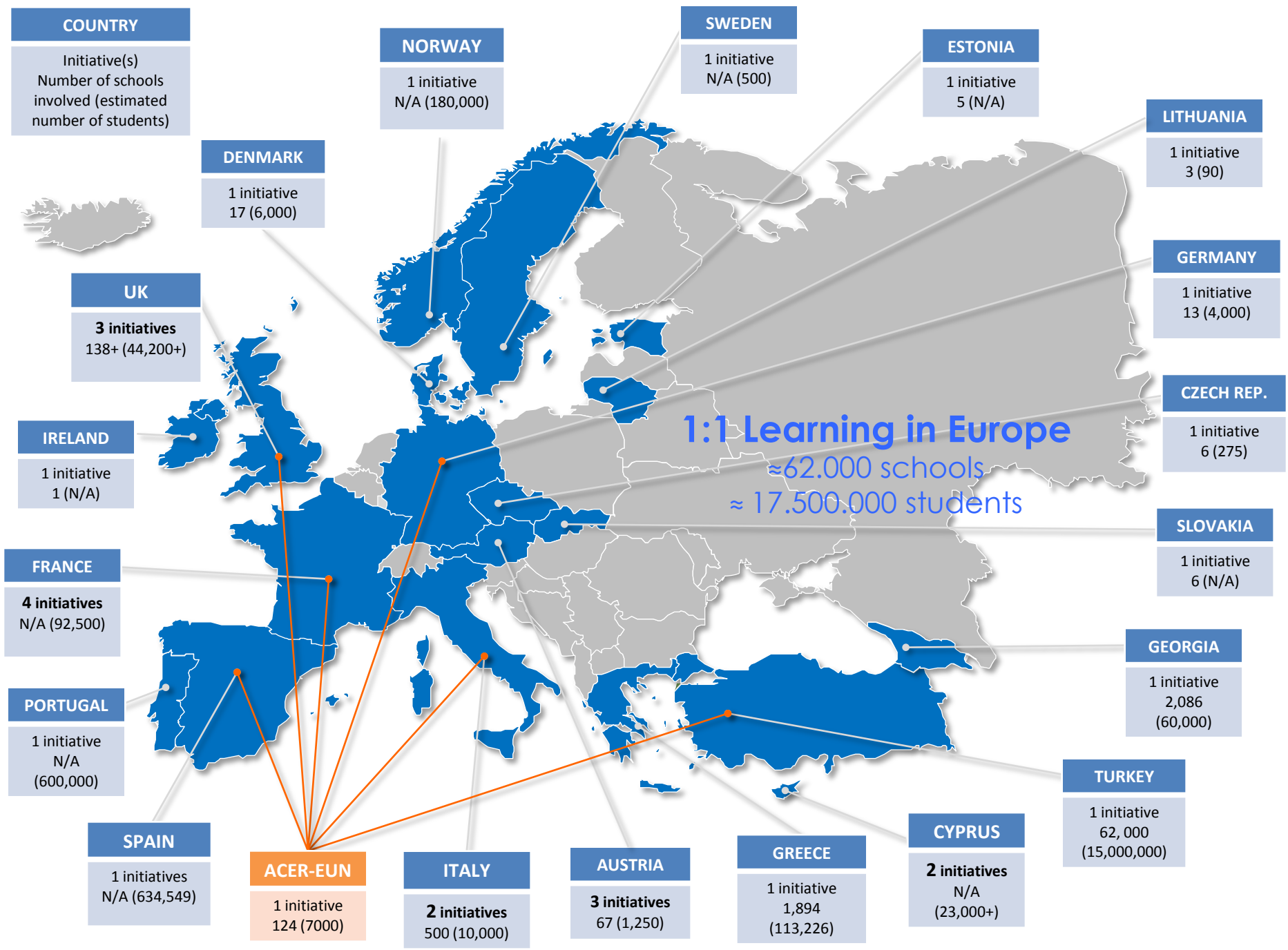
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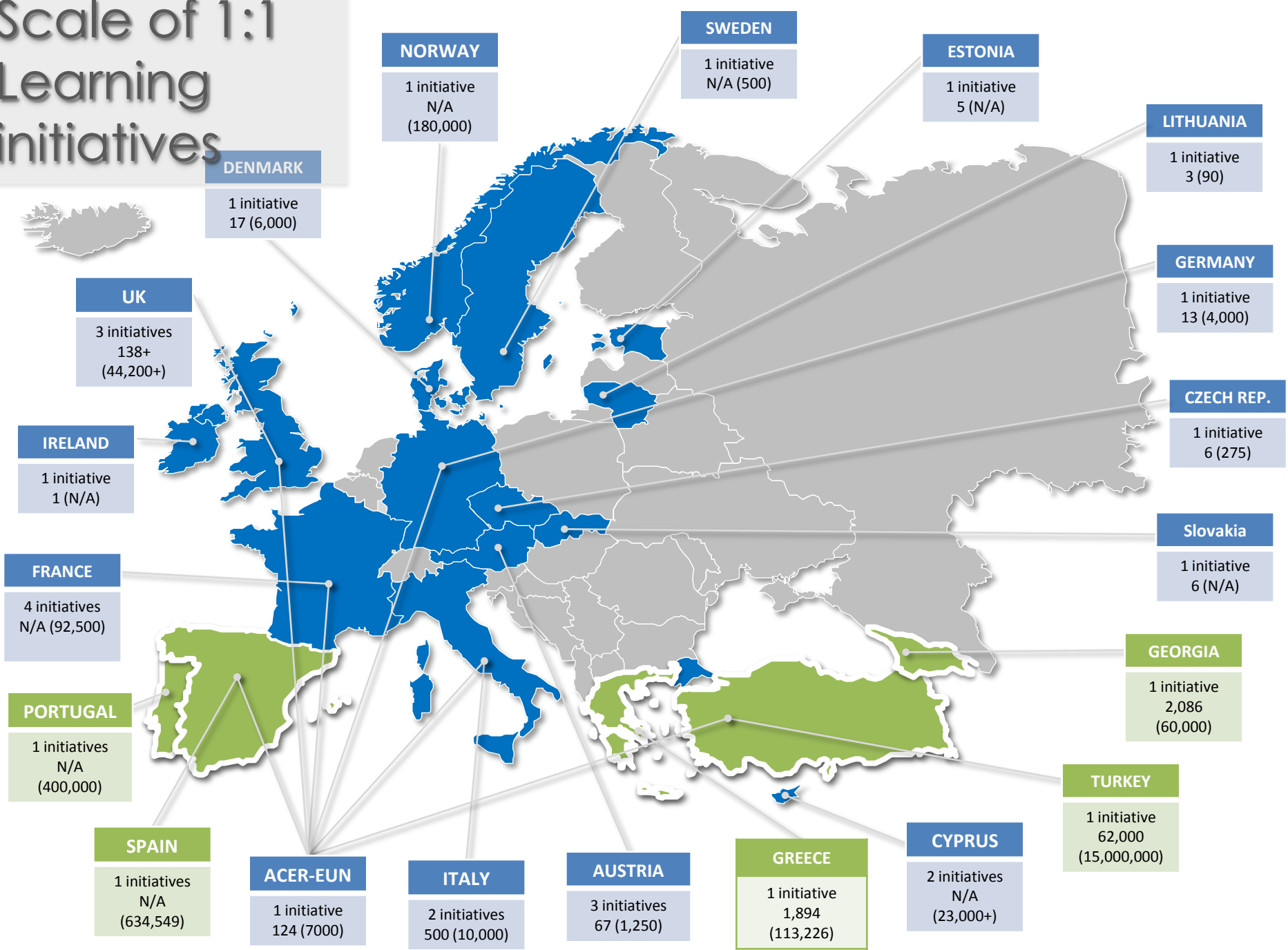


Overview of 1:1 initiatives in Europe

- Based on the 1:1 Learning study carried out by European Schoolnet (from Jan to Dec 2012) for JRC -IPTS
- 31 recent initiatives in 19 EU countries
- 62,000 schools, 17,500,000 students
- Target: Primary and secondary schools, educational focus
- *Inclusion criteria:*
 - launched within an educational framework
 - started not earlier than 2008 (*ongoing)
 - significant scale and/or impact



Scale of 1:1 Learning initiatives



France: „Ordicollège 19“, (2010-2011), Département de la Corrèze, first year students in lower secondary education were provided with a tablet.

Lithuania: (2011- 2012), Use of iPad tablet devices in education, 90 students in 3 secondary schools

Scotland: The iPad pilot (2012) was part of an exploratory programme launched by the Scottish Government, 8 Primary and secondary schools, 365 students

UK: iPad at Longfield academy (2009-2012); bottom up, local, PPP, 800 secondary students. Tablets for schools

Turkey: FATIH Project, 2011-2013: 42000 schools, grade 5-12 in preschool, primary and secondary education????

1:1 Learning initiatives vision of the ICT use

Objectives	N. of 1:1 init.	Initiatives by country
Innovate classroom and learning practices	7	UK, AT, IT, FR, DK
Implement 1:1 pedagogy	9	EU, ES, PT, SK, SE, IT, CZ, DE, DK
Improve students' learning outcomes	4	UK, SE, IE
Improve students' ICT skills and motivation	7	AT, FR, GE, ES, DE, CZ
Improve access to quality educational resources	3	DK, NO,
Foster anytime-anywhere learning opportunities (school & home use of the device)	12	AT, ES, CY, EE, FR, UK, EU
Increase ICT provision in schools	8	EL, FR, LT, TK
Provide access to (advanced) ICT equipment	4	CY, DK, LT,
Improve communication between students, teachers and parents	5	AT, CZ, FR, ES
Support leadership development	1	DK
Reduce the digital divide	5	CY, IE, LT, FR, PT, TK
Collect hands-on experiences /evidences	3	AT, LT, EU

* Each initiative focuses on more objectives

What outcomes 1:1 Learning initiatives have achieved?

From a teaching and learning perspectives

- **Improved participation** levels in class and better school attendance rates.
- **Extended learning opportunities** outside the school
- **Development of 1:1 pedagogies**
- No significant results considering **grades**
- Impact on **school organisational practices** (e.g. AT, ES) and social impact (e.g. IE, FR)

From practitioners

- Lack of clear **implementation** strategies;
- Lack of relevant educational **resources**
- Lack of **training of teachers** (in-service as well as initial) specifically on 1:1 pedagogy
- Higher initial **teachers' expectations**, which diminished towards the end of the project.
- Technological **support**

Prospects for sustainability

- **Co-financing models** in the provision of devices could offer a long-term prospective and possibility to make 1:1 an ongoing programme.
- Patterns of **ownership** and deployment;
- Adoption of an **integrated** (school/home) and **systemic approach to change**, including changes in the curriculum, assessment and organisational practices.
- **Long-term planning**, to ensure stability and efficacy;
- **Scaling-up** based on evidence to embed contextual and social practices, regardless of technology; it also requires consideration of pedagogical cultures, the building of teachers' networks ("scaling aside") and creating incentives for teachers.

The 1:1 initiative “Ordi 60- One student one portable device” in the Department of Oise (France)

Total investment: €28 Million,
over 3 years
Period: 2009-ongoing
Scope: 81 schools, 3500
teachers, 68 000 students and
their families
Grades: grade 6, 11-12 years
old
Type of devices: 66,000
laptops/12,000 netbooks,
tablets (to be supplied in 2014)
Finance/Ownership model:
Loan scheme

One student, one laptop initiative) in the Department of Landes (France)

Total investment: €50 Million
Period: 2001-2013 (ongoing)
Scope: 147 classrooms, 37
schools 1200 teachers,
51,000 students (two grades
each year)
Grades: 13-15 years old
Type of devices: 500
laptops, 960 IWBs, 976
digital projectors, and 976
desktop visualisers
Finance/Ownership model:
Loan scheme

Quantitative Evidence

Survey of Schools: ICT in education

- Relatively few students in 1:1 classes, concentrated in a few countries and at specific grades
- Limited use of their own devices in classes, but increasing with the level of education
- Minimum 50% of grade 11 students entitled to BYOD-laptop/tablet in around half of the countries, but broadly used during lessons only in Denmark



Quantitative Evidence

Survey of Schools: ICT in education



- ...doesn't say anything about the quality of the use and effect on educational outcomes



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1. Main results arising across the Netbook Pilot countries

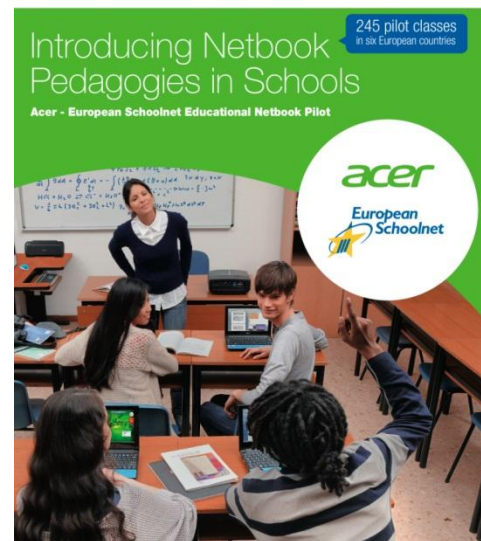
- Netbook impact
- Netbook usage
- Using netbooks **out of school**

2. Recommendations



New:

- Acer/ Chromebook Pilot
- Samsung Pilot



3. Results from the Tablet Pilot countries

- Teaching with the tablet
- School and home use
- Impact

4. Recommendations

Main results

- Develop **1:1 pedagogy** and learning scenarios
- **Alternating** of teaching approaches
- Let the device go **home**, and use it **outside** the classroom
- Balance between **innovation** and **step by step integration**
- Use of devices in **assessment**
- Preparation vs. **integration**

Creative Classrooms Lab (April 2013- March 2015)

“Is it a classroom that is nicely decorated?”



Piloting the use and benefits of tablets in schools

Creative: develop innovative pedagogical scenarios, focus on how practice is changing as a result of tablets being used for collaboration, personalisation and active learning.

Classrooms: carry out pilots in 45 classrooms in 8 countries: Austria, Belgium, Czech Republic, Italy, Lithuania, Portugal, Slovenia, UK

Lab: Act as an ideas lab bringing together policy makers, innovative teachers and industry suppliers



Originality, value,
new ideas and awareness, thinking skills,
learner empowerment

Policy Experimentation | Scenarios | School Pilots

Learning stories

Flipped Classroom

Content Creation

Personalisation

Collaboration

Policy Priorities
Use of digital resources
BYOD (Bring Your Own Device) strategies
Supporting informal, non-formal learning (school use, home use)
Classroom
Assessment
Cloud Computing
Exploring new forms of
Integration with other technologies: IWBS
Investigating funding, ownership and access models
Creation of digital resources
Integration with other technologies: VLEs
Engaging other actors in the process of learning (libraries, museums, local business)

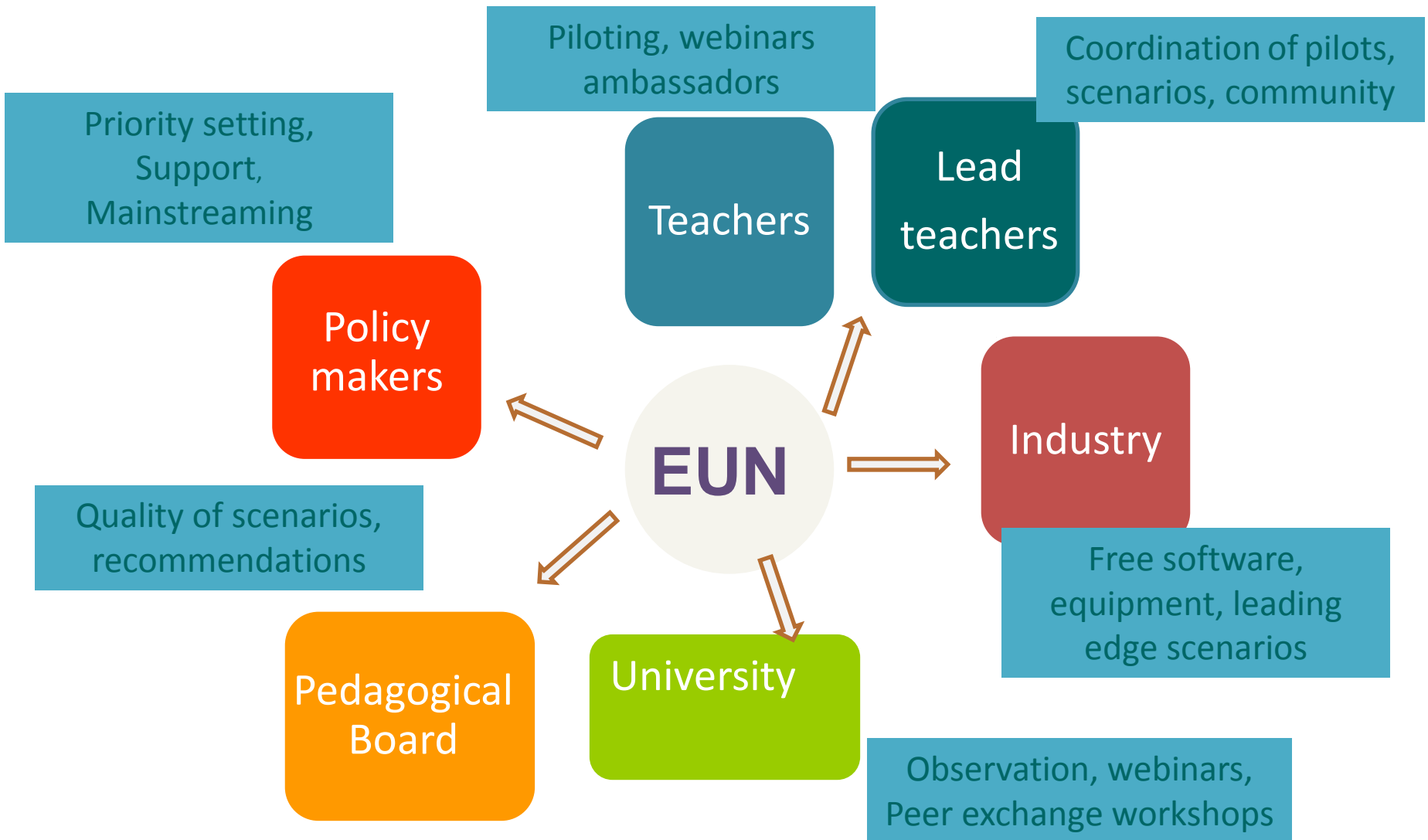
Liberating Learners

Collaboration & assessment

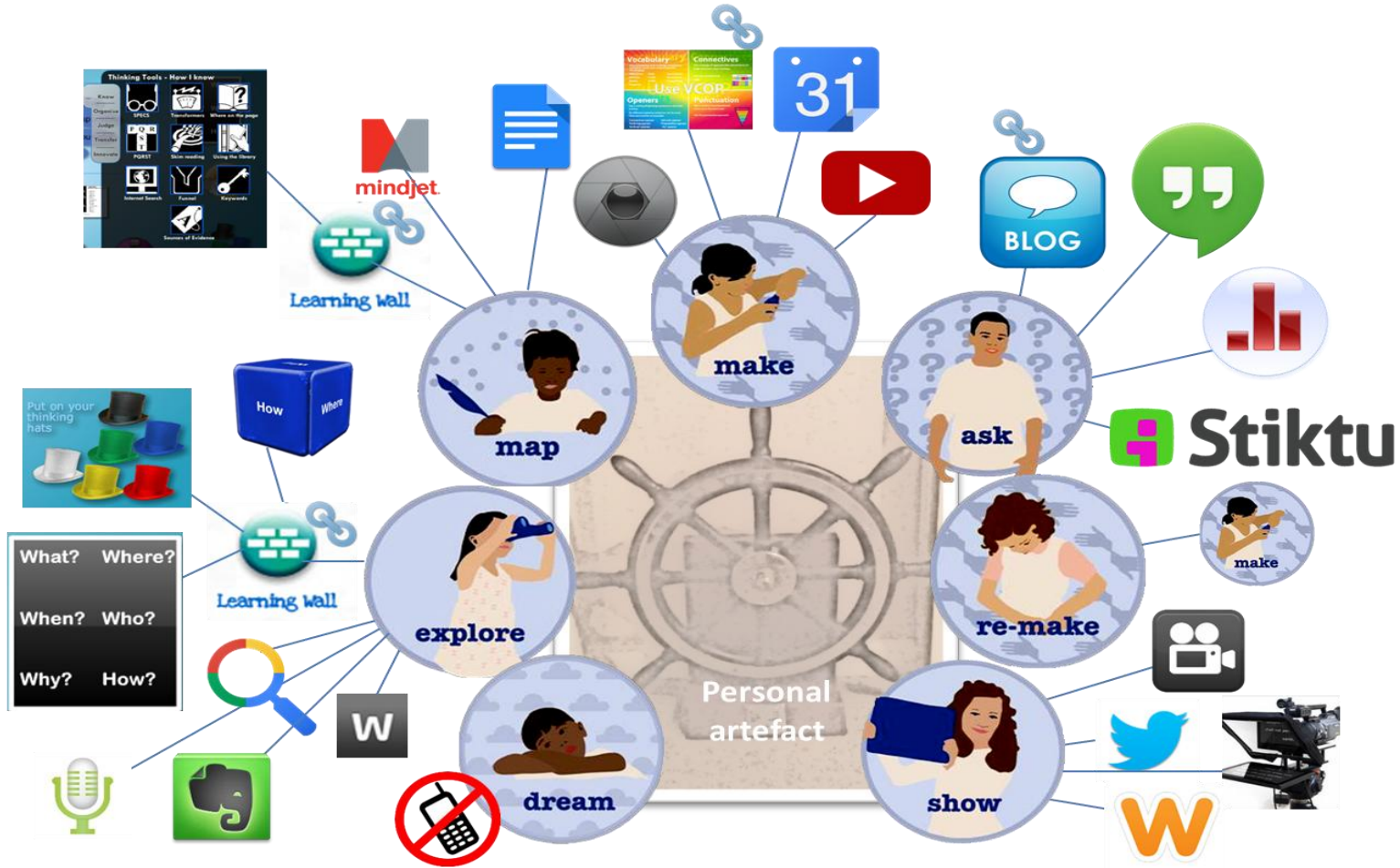
School to school collaboration

Scenarios for pedagogical change?

Project Actors experimenting at all levels...



How the tablets are used



Liberating Learners Scenario

UK, Portugal, Lithuania



“The development of independent learning and thinking skills through real life (authentic) tasks and learning beyond the classroom walls.”

- Peer to peer sharing/mentoring
- Students developing a learning vocabulary
- Development of positive learner attributes and preferences and dispositions
- Project work with an authentic basis
- Developing guidelines for teachers to ‘let go’
- Assessment tools including self-assessment
- Reflection



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Many examples of the creative classroom



<http://creative.eun.org/videos>

[UK | School: Penwortham Priory Academy | Teacher: Lisa Cowell](#)

[UK/Skinners Kent Academymaster EU video-5min on Vimeo](#)

The Creative Classrooms Lab project is coordinated by European Schoolnet and it has been funded with support from the European Commission.

Why tablets?



- Mobility
- portable active learning experiences -> conceptual portability
- Affordability
- 1:1
- Functionalities
- Unobstrusiveness-> greater focus on the learning



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“The Future of education...



is in the **content**, not the 'container'.



It's about more than just content, of course -- it's also about the **connections** and the **communities** (students collaborating with each other, teachers supporting other teachers) that technologies can help enable, catalyze and support as well.“

Mike Trucano- Worldbank



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It is not the content...

- that is inspiring, but.... the **teacher**
- **Co- development** of content- active learning
- Pedagogical scenarios/learning stories that foster **collaboration** and **independent learning**
- Part of an **ecosystem** at school and one that successfully – links school and home



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**Creative Classrooms Lab:
Final observation visit results
and recommendations**

<http://creative.eun.org>



**See you on the 25 March
in Brussels.
Thank You!**