Innovation and Mainstreaming
How to sustain the results of EC education projects?
Marc Durando
Presentation structure

- Rationale for iTEC
- iTEC design and achievements
- Some reflections on innovation in Education
- Challenges represented by mainstreaming innovation
Rationale for iTEC
Some recurrent facts

Is the school environment so favourable?

School boredom has no chance against the addictive draw of the outside world.

Within schools, technology is visible by its absence or by its superficial ad hoc use.
The Survey of Schools: ICT in education

Student's ICT based activities frequency during lessons at grade 11 in general education (mean scores; 2011-12)

Frequency scale

Approaching several times a month
Approaching once a week

Students’ use of ICT during lessons not yet on a weekly basis
Some ICT learning tools and resources are never used during lessons by a large majority of students.
Some recurrent facts
Is the school environment so favourable?

School boredom has no chance against the addictive draw of the outside world.

Within schools, technology is visible by its absence or by its superficial ad hoc use.

How can technology help engaged learning?
Innovation challenges

- Innovative teachers
- Innovative education systems
- Innovative school Global approach
iTEC design and achievements
iTEC vision

Connecting to current stakeholder practice

Achieving system wide change

Impacting all schools

Large school pilots - > 2000 classes
ITEC Approach

If we get the pedagogy right and incorporate technology accordingly learning will become easier, deeper and more engaging.

Never think of technology without worrying about teachers. Teachers with technology will make the difference with their students.
How to define innovation in Education

- An idea, practice, or object that is perceived as new by an individual or other unit of adoption [Rogers, 1995] – Innovation is contextual
- An innovation is a change that creates positive value and is better or more effective than its predecessor [Kirkland and Such, 2009]
- Significant educational innovation – or change in practice – must contain three elements:
  - Use of new revised materials (curriculum materials or technologies)
  - Use of new teaching approaches (teaching strategies or activities)
  - Alteration of beliefs (pedagogical assumptions) [Fullan, 2007]
Innovation in iTEC

Innovation is relative to each pilot country

iTEC maturity model

Self review model

Future Classroom Scenario Toolkit
Schools can assess their current level of maturity in how it uses ICT.
Creating an educational vision that is ambitious but achievable

Involving all key stakeholders involved in designing a schools’ ICT strategy

Focusing on advanced pedagogical practices and change management

Toolkit encourages whole school use of ICT
Innovation Maturity Model – Tool for self review

The stage of Innovation

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<thead>
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<th></th>
<th>Exchange</th>
<th>Enrich</th>
<th>Enhance</th>
<th>Extend</th>
<th>Empower</th>
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<tbody>
<tr>
<td>Classroom</td>
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<td>Institutional</td>
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<tr>
<td>System</td>
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Some reflections on innovation and mainstreaming in Education
Main challenges of Innovation in Education

- Governance of innovation
- Mainstreaming
- Training (Pre service, In service)
Governance of innovation
New role of the central level

Validation the conformity
Compliance and regulation

Support to schools
Flexibility

Instruction to schools
how to operate

Support schools in a
differentiated manner to
make their choices

Take the measure of the necessary change
At all levels of the governance process

Challenge of responsibility (accountability)
and of assessment
Training of teachers – Pre / In service

Use of ICT is still optional in curricula
Issue is the pedagogical use of technology not how technology works

Collaborative training approaches

Lack of new pedagogical models

Provide teachers with support
How to integrate in practices
Need to provide time to teachers
The Survey of Schools: ICT in education

Means through which teachers engage in ICT related professional development during the past two years
(in % of students; EU level; 2011-12)

- Personal learning about ICT in your own time: 70% (Grade 4), 74% (Grade 8), 72% (Grade 11 gen.), 71% (Grade 11 voc.)
- ICT training provided by school staff: 40% (Grade 4), 51% (Grade 8), 44% (Grade 11 gen.), 41% (Grade 11 voc.)
- Participation in online communities: 25% (Grade 4), 31% (Grade 8), 28% (Grade 11 gen.), 28% (Grade 11 voc.)

Comes as a (good) surprise (READINESS)

Untapped potential
The 3 Gaps of innovation

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<tr>
<th>Policy gap</th>
<th>Identification gap</th>
<th>Evidence gap</th>
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| - Policy making needs willing adopters | - Less observable because process related  
- Lack of communication | - How to evaluate innovation and when? |
Mainstreaming Challenges
Mainstreaming issue
From a few to many ... getting everyone involved

- The Pioneers/Adventurers
- The Practitioners
- The «Transformers»
  ...what’s possible!
- The neophytes/ «unwise»

No of staff

<table>
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<tr>
<th>Very</th>
<th>Technology Comfort Level</th>
<th>Not</th>
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<td>3%</td>
<td>75%</td>
<td>25%</td>
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What are the inhibitors to a mainstreaming approach?

- Embed the innovation in the school approach
- Implement the change versus inherent conservatism
- New pedagogical and successful models
- Shift current culture (head of school, teachers institutional support)
- Parents expectations - more technology but conservative approach to school organisation
What are the enablers to a mainstreaming approach?

- Cooperation: the driving force
  - Confidence of teachers
  - Role of head of schools (more autonomy)
  - To give time to teachers

- New school environment (in and out of the class)

- Use of ICT
  - Technology on / technology off

- Successful pilots (possible changes in school organisation)
Integrating technology and pedagogy in teaching and learning processes

Don’t focus on technology – focus on its use

Four criteria

- Irresistibly engaging for students and teachers
  *Learning easier and more interesting*
- Efficient and easy to use
- Technology ubiquitous 24/7
- Steeped in real-life problem solving
Two potential complementary mainstreaming approaches

Systemic change

- Associating all stakeholders
- Integrating all factors

Adoption from the bottom

- Large scale adoption from teachers
- Full integration in practices
The scaling up challenge

Capacity building

Implementation team

Policies

Readiness for change (information, time, ...)

Staff

Partners

Stakeholders

Funding

Regulation

Change in teaching and learning practice

Systemic change

Transformation zone

Local

Region

State
Large scale adoption from teachers

- Test and validation of the added value and the impact of new approaches

- Leveraging teacher networks – making the innovation known – large scale training mechanisms and active teacher communities

- Governance and regulation by the teaching profession?
## The 3 critical success factors

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<th>Make it known</th>
<th>Recognition &amp; Time</th>
<th>Political decision</th>
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<td>• Evidence demonstrating it can happen</td>
<td>• Giving recognition and time to teachers</td>
<td>• No way backwards possible</td>
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Recommendations - mainstreaming approach

Balance between top down and bottom up approaches

- Enabling legislation to facilitate the new practices
- Strengthening the evidence based of new practices (representative pilots)
- Empowering teachers to take up new practices
- Nurturing innovation through networks CoP

Four recommendations
Conclusion

- The future classroom
  more a pedagogical challenge than technological

- Complex issue
  obstacles to overcome technical integration but more importantly in terms of processes

- Cooperation and comparison between countries
  indispensable laboratory of practices and analysis

- Research (and evaluation)
  even more necessary to support and guide a major evolution of our education systems
Thank you

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