D7.2 REPORT ON SECOND MAINSTREAMING WORKSHOP: CAPACITY DEVELOPMENT

European Schoolnet

V.1. July 2014

V.2 September 2014

v.3 November 2014
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OVERVIEW CCL PROJECT

How can tablets support new ways of teaching and learning in schools?

The Creative Classrooms Lab (CCL) project is developing innovative teaching and learning scenarios involving the use of tablets in and out of school.

It will validate these in policy experimentations involving nine Ministries of Education in Europe and 45 classes that are already making use of tablets from different suppliers.

Creative Classrooms Lab Partners

- European Schoolnet, BE
- University of Wolverhampton, UK
- Direção-Geral da Educação (DGE), PT
- Centre of Information Technologies in Education (CITE), LT
- National Education Institute, SL
- Bundesministerium für Unterricht, Kunst und Kultur (BMUKK), AT
- Dům zahraničních služeb, CZ
- Flemish Ministry of Education, BE
- Fédération Wallonie-Bruxelles, BE
- e-Learning Foundation, UK
- INDIRE, IT

Project facts

Start: April 2013
End: March 2015
Total budget: ca. 1 Million Euro
Coordinator: European Schoolnet
Partners: 10 partners from 8 countries
INTRODUCTION

The CCL Policy experimentation is conducted in order to prompt Ministries of Education to introduce changes in their education systems/curricula and help them develop the capacity to foster large scale innovation. The CCL school pilots should target concrete common policy concerns that MoE are already facing on how tablets can be integrated in schools. During three mainstreaming workshops (also referred to as ‘capacity building workshops’), CCL policy makers discuss their national priorities and develop common Policy Maker Scenarios. On the basis of these Policy Maker Scenarios, Policy Makers and lead teachers develop Learning Scenarios that guide the teachers’ use of tablets during the pilots (see D2.2 Report on Scenario II Scenario Development).

The second capacity building workshop was held on 23 May 2014 in Brussels. All CCL partners attended the workshop. This second workshop was focused on capacity development. It drew on conclusions and recommendations from the WP4 evaluation of the policy experimentations in year 1 and in order to examine whether there have been changes to the initial set of policy challenges identified during the first workshop. Based on this transnational analysis, it provided an initial set of recommendations for what changes participating MoE’s may need to make in their education systems/curricula in order to foster and sustain innovative use and large scale implementation of tablets. Policy Makers developed three Policy Maker Scenarios around the three identified key topics ‘school-to-school collaboration’, ‘collaboration & assessment’ and ‘Independent Learners’ (available on the CCL website). During the workshop, a short video captured CCL Policy Maker’s views on changes necessary both at system and school level to support teaching and learning with tablets.
ROLE OF THE WORKSHOP WITHIN THE SCENARIO DEVELOPMENT PROCESS

The Creative Classrooms Lab project takes place in two cycles, which are repeated each year of the project, cycle one runs from May 2013- April 2014 and cycle two from May 2014- March 2015. Both cycles consist of the scenario development process and the pilot implementation and evaluation. The second CCL capacity building workshop was the starting point for the second scenario development process (May 2014- September 2014) where the second set of scenarios was produced to be piloted by CCL teachers in schools from October 2014 to January 2015. During this second workshop, CCL partners developed three common Policy Maker Scenarios around identified key priorities: collaboration and assessment, school-to-school collaboration and independent learners. On the basis of the scenarios developed during the workshop, policy makers and lead teachers developed together Learning Stories during a second Pedagogical Scenario Development workshop in June 2014 (see D.2.2 Report on Phase II Scenario Development). 45 CCL teachers derive their own lesson plans from the Learning Stories.
LESSONS LEARNT IN YEAR 1

LESSONS LEARNED FROM OBSERVATION VISITS

Diana Bannister, University of Wolverhampton, summarized lessons learned from the year 1 school observation visits in Austria, Belgium Flanders, Slovenia and the UK. In particular, she highlighted the:

- importance of breaking the learning process down into smaller outcomes,
- influence of learning spaces on learning activities,
- need to encourage teachers to experiment with more innovative practices,
- need for flexible organization of lesson times (double lessons vs. standard 50 minute lessons),
- importance of enabling students to make own decisions.

For all results of the first round of observation visits, see 4.2 Interim Report.

CHALLENGES TO BE TACKLED / RECOMMENDATIONS - GROUP DISCUSSIONS BY SCENARIO THEME

Groups were formed around Policy Maker Scenario themes of the first cycle.

GROUP ON SCENARIO „PERSONALISATION“ (CZECH REPUBLIC, LITHUANIA, UK)

<table>
<thead>
<tr>
<th>Challenges to be tackled</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Be very explicit about what is expected from the teachers</td>
<td></td>
</tr>
<tr>
<td>Role of lead teacher is very important</td>
<td></td>
</tr>
<tr>
<td>Associate Partner offers came too late, needed to be there from the start</td>
<td></td>
</tr>
<tr>
<td>Role of Pedagogical Board must be clear from the start</td>
<td></td>
</tr>
<tr>
<td>Involve the Head teachers as well as the teachers</td>
<td></td>
</tr>
<tr>
<td>Cultural challenge to allow learning via the scenarios outside the classroom and different lesson timing</td>
<td></td>
</tr>
<tr>
<td>A switch from single curriculum approach to multi-disciplinary approach</td>
<td></td>
</tr>
<tr>
<td>Need to align classrooms with real life</td>
<td></td>
</tr>
<tr>
<td>Low ability group took a while to learn how to use the devices</td>
<td></td>
</tr>
</tbody>
</table>

GROUP ON SCENARIOS „CONTENT CREATION“ & „FLIPPED CLASSROOM“ (BELGIUM FLANDERS, ITALY, PORTUGAL)

<table>
<thead>
<tr>
<th>Challenges to be tackled</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario is too “artificial” for creating lesson and steps overlap (explore and make)</td>
<td>Clearly link to their curriculum and map the scenario with their own lessons</td>
</tr>
<tr>
<td>Output: big variety amongst teachers – classes</td>
<td>Provide more guideline regarding output</td>
</tr>
<tr>
<td>Quit our role in giving feedback</td>
<td>Teachers should provide their own evidence and REFLECT on their approach</td>
</tr>
<tr>
<td></td>
<td>Evidence from parents (in case of flipped classroom)</td>
</tr>
</tbody>
</table>
CURRENT NATIONAL POLICY CHALLENGES RELATED TO TABLET INITIATIVES

OVERVIEW

European Schoolnet prepared a short paper presenting stimulus questions, thoughts, developments, trends and issues that Policy Makers might take into account when creating scenarios. The paper presents in particular findings from the Horizon K-12 global and Europe reports and current trends, challenges and opportunities like universal learning design, student and teachers competences and issues related to assessment, e.g. curriculum and assessment, assessment for learning and badges to accredit learning (see Annex II).

STIMULUS QUESTIONS

1. What major social and religious (where appropriate) conditions currently affect education in the school, related to social and gender equity, social services, human relationships, human capital development, etc.?
2. What major economic conditions currently affect education in the school, related to the structure of the economy, broad-based prosperity, the distribution of wealth and resources, etc.?
3. What major technological development do you foresee, related to the power and ease of use of digital devices, the availability of digital devices, networking, multimedia, social media, etc.?
4. How will education transformation contribute to / mitigate these changes?
5. How do these issues impede/advance equal access to education and use of educational tools, such as ICT, for disadvantaged students, students with special needs and both females and males?
6. What are past future scenarios and visions that have not materialized? Why do you think they did not come to be? What can you learn from these experiences?

PRIORITIES GATHERED FROM CCL POLICY MAKERS

Prior to the second workshop and in order to fuel the discussions and the drafting of the scenarios during the workshop, European Schoolnet systematically gathered and analyzed information from partner organizations (ministries and related agencies) concerning the next round of scenarios via an online questionnaire and template.

For the second Capacity Building workshop, each partner was asked to provide at least 2 scenarios, 1 general one and one leading-edge scenario, using the provided template. The template gathered information on the proposed theme/priority for each country, the issues the proposed scenario aims to address and main features. The template used was an updated version of the template used in year 1, including a question on lessons learned from the first year. In addition, CCL partners filled in an online questionnaire providing information on their current priorities (low, medium, high) with 1:1 tablet initiatives. This question was the same as in the questionnaire sent prior to the first workshop in May 2013, in order to ensure comparability of the results. Outcomes of this exercise were presented to partners in the workshop. An overview of the answers is presented in Annex II.

1 https://www.surveymonkey.com/r/9XG5DS6
HIGH PRIORITY QUESTIONNAIRE

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>HIGH PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of digital resources</td>
<td>(4) Austria, Belgium Flanders, Italy, Portugal</td>
</tr>
<tr>
<td>BYOD (Bring Your Own Device) strategies</td>
<td>(4) Austria, Belgium Flanders, Czech Republic, Italy</td>
</tr>
<tr>
<td>Supporting informal, non-formal learning opportunities (out of school use, home use of tablets)</td>
<td>(4) Czech Republic, Italy, Portugal, Slovenia</td>
</tr>
<tr>
<td>Lesson organization and classroom management</td>
<td>(4) Belgium Flanders, Czech Republic, Italy, Portugal</td>
</tr>
<tr>
<td>Subject specific use</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Interdisciplinary use</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Cloud Computing strategies</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Exploring new forms of assessment</td>
<td>(3) Italy, Portugal, Slovenia</td>
</tr>
<tr>
<td>Integration with other technologies: IWBs</td>
<td>(2) Czech Republic, Italy</td>
</tr>
<tr>
<td>Investigating funding, ownership and access models</td>
<td>(2) Czech Republic, Belgium Flanders</td>
</tr>
<tr>
<td>Creation of digital resources</td>
<td>(1) Italy</td>
</tr>
<tr>
<td>Integration with other technologies: VLEs</td>
<td>(1) Italy</td>
</tr>
<tr>
<td>Engaging other actors in the process of learning (libraries, museums, local business)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

* UK did not mention any high priority topic, only medium priority (Use of digital resources, Creation of digital resources, subject specific use, interdisciplinary use)

OTHER TOPICS MENTIONED IN QUESTIONNAIRE

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of tablet for inclusion</td>
<td>Italy</td>
</tr>
<tr>
<td>Provision of more bandwith and fiber to schools</td>
<td>Belgium Flanders</td>
</tr>
<tr>
<td>Changing regular education (first tests are running) into 2/5 to 3/5 Education System: 2/5 in Group work/ free learning, 3/5 traditional learning each week</td>
<td>Austria</td>
</tr>
<tr>
<td>Technical support of ICT using in schools (school wifi, free internet access for students, safety)</td>
<td>Czech republic</td>
</tr>
<tr>
<td>Implementing the use of e-textbooks, e-materials and evaluation of it</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Coding skills, interest in MOOCs (not really relevant to schools), 3D Printers</td>
<td>UK</td>
</tr>
</tbody>
</table>
LESSONS LEARNT FROM FIRST ROUND OF IMPLEMENTATION OF SCENARIOS

In AUSTRIA, lessons learnt were that the Flipped Classroom model offers a scenario for group learning but still needs to be taken further. In BELGIUM FLANDERS, the main benefits of tablets are, based on the CCL observation visits, their mobility and multimedia. Therefore, the idea was to combine both benefits in a project work about remembrance education for year 2. In the CZECH REPUBLIC, the year 1 scenario helped students to learn about the basic use of tablets. The aim for the new scenario was now to move one step further by enabling students to communicate to each other with the help of tablets, also outside the classroom, as in this point using tablets becomes unique. In ITALY, it was discussed, based on the comments from the teachers, that it would be useful to have tangible outputs, e.g. documentation, videos, etc. in order to have evidence of all Learning Activities. In PORTUGAL, one conclusion from the work on the first scenario was that real time feedback given by teachers would improve students’ results and enhance their motivation to learn. Further, a mismatch between tasks and assessment was identified. In the UK, one lesson learnt was that students need to be better prepared for the work with tablets, as some struggled initially. Further, there would be significant benefits in getting parents more involved. There needs to be a clear documentation and evidence of the learning that takes place. It is important to consider how feedback is provided to students and how to measure the impact that feedback has upon learning goals.

DEFINING COMMON POLICY CHALLENGES – YEAR 2 (PER GROUP)

During the workshop, CCL Policy makers were grouped to define common policy challenges.

GROUP ON SCENARIO „PERSONALISATION“ (CZECH REPUBLIC, LITHUANIA, UK)

1. Better explore the year 1 scenarios according to the equipment the classroom has
   - BYOD
   - Monobrand
2. Possible research questions:
   - impacting on the scenario’s – limitation of different brands/devices
   - impacting on all aspects of school organisation: didactics, infrastructure, esafety, bullying policy, insurance,…
2. More focus & guidance on aspects lesson organization & classroom management in the scenarios of year 2
3. Assessment of output/outcome of pupils performance should get more focus. How are teachers tackling this?
4. Assessment of teachers (own) performance → How are teachers reflecting their own practice with the tablets

GROUP ON SCENARIOS „CONTENT CREATION“ & „FLIPPED CLASSROOM“ (BELGIUM FLANDERS, ITALY, PORTUGAL)

1. Nurture independent thinkers and learners
2. Take learning beyond the classroom
3. Inter-disciplinary use
4. Professional development – (who responsible, who pays?)
**GROUP ON „COLLABORATION“ (AUSTRIA, BELGIUM WALLONIA, CZECH REPUBLIC)**

| collaboration and assessment or assessment in collaboration or self-assessing in the group |

**DEVELOPING NEW SET OF POLICY MAKER SCENARIOS**

Definitions relating to the scenario development process are outlined in **D.3.1. Protocol of experimentation for policy experimentation**.

**POLICY MAKER SCENARIOS**: are developed by the CCL project partners (policy makers) based on a methodology developed in the iTEC project where future classroom scenarios provide a vision for innovation and advanced pedagogical practice. CCL partners use this approach in order to describe the types of learning and teaching activities and processes to be supported by the use of tablets during the national pilots. These scenarios serve as a reference framework for the learning stories (or pedagogical scenarios) to be developed by the lead teachers and the policy makers of the project.

**POLICY MAKER SCENARIOS BY COUNTRY**

In year 2 of the project, CCL partners provided 8 national policy scenarios prior to the mainstreaming workshop. The scenarios submitted by individual country were shortly presented during the workshop.

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D printing – use in all grades and most subjects</td>
<td>Austria</td>
</tr>
<tr>
<td>2/3 and 3/5 weekly lessons – 2 days individualised/ free and group learning, three days traditional learning</td>
<td>Austria</td>
</tr>
<tr>
<td>Use of mobile technology for engaging project work about remembrance education</td>
<td>Belgium Flanders</td>
</tr>
<tr>
<td>School to school (student to student) collaboration</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Inclusive learning using tablets</td>
<td>Italy</td>
</tr>
<tr>
<td>Assessment and Evaluation</td>
<td>Italy</td>
</tr>
<tr>
<td>Changing assessment, changing learning</td>
<td>Portugal</td>
</tr>
<tr>
<td>Nurture independent learners and thinkers</td>
<td>UK</td>
</tr>
</tbody>
</table>

**FROM POLICY MAKER SCENARIO BY COUNTRY TO COMMON POLICY MAKER SCENARIOS**

After Policy Makers had presented their individual Policy Maker Scenario(s), countries were grouped according to common interest and Policy Maker Scenarios were developed. The main challenge of this process was to integrate and combine the already very specific ideas of several national scenarios and challenges provided by policy makers prior to the workshop into a group scenario, which reflects the ideas of several (2 to 3) countries. European Schoolnet facilitated a guided open discussion between CCL partners on how the core ideas of their
national scenarios could be developed into common scenarios. The partners critically questioning each other’s ideas helped to clarify the main ideas around the table and possible implementations.

The template required:

- A description of the key challenges the scenario will respond to
- The scenario narrative planning (who is involved, what type of technology will be used/other resources needed, the core purpose of the scenario, when it takes place, and what happens when)
- The scenario narrative

A first general decision was to keep the same approach as in year 1 and to choose broad methodological approaches that can be adapted to specific national and local circumstances. The suggestion to develop scenarios with concrete titles like ‘It is all about money’ instead was not welcomed by the majority, as this approach does not allow for the same flexible implementation and might be difficult to grasp for teachers.

Another consideration was that several CCL Policy Makers did not want to completely abandon the year 1 Learning Scenarios but build on lessons learned and extend the learning on particular aspects. This approach is reflected in the choice of the three new Learning scenarios: The scenarios ‘school-to school collaboration’ and ‘iGroup (collaboration and assessment)’ explore specific aspects of the year 1 scenario ‘collaboration’ and the scenario ‘Liberating learners (Independent learners)’ intends to take the year 1 scenario on personalization one step further.

Another issue discussed was whether the topic ‘learners with special needs’, as suggested by Italy, could be integrated across scenarios or treated as a separate scenario. In particular, the personalised learning approach lends itself to benefit students with special needs. This discussion was to be continued as part of workshop follow-up.

Finally, as most partners wanted to extend ideas from year 1 scenarios and the focus was on developing scenarios that were user friendly for teachers, there was no majority in favor of further developing the two ‘leading edge’ scenarios proposed by Portugal and the UK.

<table>
<thead>
<tr>
<th>POLICY MAKER SCENARIO</th>
<th>COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>“iGroup” (Collaboration and assessment)</td>
<td>Austria, Italy, Slovenia</td>
</tr>
<tr>
<td>“Liberating learners (Independent learners)”</td>
<td>Lithuania, Portugal, UK</td>
</tr>
<tr>
<td>“school to school collaboration” (Use of mobile technology for engaging project work about remembrance education)</td>
<td>Belgium Flanders, Belgium Wallonia, Czech Republic</td>
</tr>
</tbody>
</table>
SUMMARIES 2ND CYCLE POLICY MAKER SCENARIOS

LIBERATING LEARNERS (INDEPENDENT LEARNERS)
- LITHUANIA, PORTUGAL, UK

The goal of this scenario is to help learners to become more independent in their own learning. Students should be encouraged to learn how to learn. Authentic assessment and possibly mentoring (older/younger students) play a role for this scenario. The scenario narrative describes a teacher perspective, as the success of this scenario is dependent on the teachers’ ability to give more space to its’ students (without removing its role in the learning process). There should be an agreed timescale on learning outcomes but freedom for the learner between these points.

AIM
● The development of independent learning and thinking through real life (authentic) tasks and learning beyond the classroom walls.

BRIEF DESCRIPTION
● Peer to peer sharing/mentoring
● Students develop a learning vocabulary
● Develop positive learner attributes and preferences and dispositions
● Project work with authentic basis
● Develop guidelines for teachers to let go!
● Assessment tools including self-assessment
● Reflection

RESOURCES
● Self-cognition tools
● De Bono thinking hats
● Solo taxonomy
● Kipling questions
● Tablets! Ideally one each, 24/7
● Means to store, retrieve and organise pupils work
● Digital libraries
● Student generated resources
● Local community
● Means for teachers to feedback to students e.g. Showbie, Edmodo

NARRATIVE
Mrs Franco has a class of 25 students for her geography class. At the start of term she asks them to complete a self assessment to help her understand their learning style, and approach to their learning. Using this information she designs a programme of learning that will encourage the students to take responsibility for their own learning. Students are not confined to the classroom, and are encouraged to find resources and information from within their own family and their local community as well as digital resources such as the Internet, etc. Her role is to define the objective or goals of the project, to encourage and assist, to feedback regularly, but not to spoon feed the students. Students can choose to work alone or in groups, but are expected to be ready to present their work at an agreed point. The teacher will have
briefed the parents in advance of what the project will be about, what the students are expected to do, and how parents can help. Role of the teacher is to support at an individual level.

“iGROUP” (COLLABORATION AND ASSESSMENT)
- AUSTRIA, ITALY, SLOVENIA -

| AIM | Teacher: track of the individual contribution of a student to the group  
|     | Student: feedback and reflection of each students work, development of personal competences and analytical/presentation/critical thinking/interact skills |
| BRIEF DESCRIPTION | The teacher defines the task, each student gets a role and track his/her progress. Feedback is given within the group and from other students out of the group. The teacher evaluates the individual progress within the group and the overall group performance. |
| RESOURCES | Tablets and a presentation device, WiFi and internet connection, learn management system for sharing the inputs |

NARRATIVE

Linda is given by her teacher as task to produce a video (and with help of her group) about the travel restrictions during world war I. Her role within her groups is as a reporter for research, storyboard, etc. and documentation/desk research/ interviews/ etc. In the group is a video maker, writer of the video script, coordinator of the group (timetable, organizing the required venue, etc.), editor and proof reading. Linda has to reflect on her own contribution and send an interim report (on pro and cons on the contributions of her peers) on a regular basis to the teacher. The teacher gives feedback to Linda and advise her how to tackle group problems and about her performance. The group has to discuss the feedback and adjust accordingly the project. Linda’s group present their product to the other groups. Linda’s group has to give feedback on the other products and individual performance of group members. The teacher gives final feedback to all groups and each individual student about reaching the target, competences of each student etc.

SCHOOL TO SCHOOL COLLABORATION – „USE OF MOBILE TECHNOLOGY FOR ENGAGING PROJECT WORK ABOUT REMEMBRANCE EDUCATION”  
BELGIUM FLANDERS, BELGIUM WALLONIA, CZECH REPUBLIC

| AIM | Based on the CCL observations, there seem to be 2 main benefits of using tablets: mobility and multimedia. We try to combine these 2 benefits in a project work about remembrance education.  
|     | School collaboration can improve different skills and competences such as team work, cultural competences, language learning, etc. |
D7.2 Report on second Mainstreaming Workshop: Capacity Development

**Brief Description**
- This scenario should provide teachers with ideas about how to use mobile devices to work around a topic (may be remembrance education (RE) but it can be anything)
- Pupils from different classes present each other in a visual way
- Pupils learning from each others’ approach
- Common lesson planning by teachers (requires cooperation from teachers)

*In case of remembrance education*
- History
- Citizenship is a cross-curricular topic
- Remembrance education is a cross-curricular topic

**Use of Tablets**
- Collaboration apps on tablet such as skype, snapchat,…
- Presenting tools such as speaking avatars (Morfo app)
- See learning story (for instance go to the museum, interview someone,…)
- Inquiry, research and data collection: e.g. RE pictures of traces of world war I
- Assessment or evaluation

**Narrative**

**Monday:** Lasse, Lukas, Ranya and their fellow pupils have to create a speaking avatar in English of themselves using the Morfo app where they put in their own recording about who they are, where they live, what their hobbies are and how old they are. At the end of the lesson pupils publish their speaking avatar to twinspace. Later on they look at the avatars from the partner school.

**Wednesday morning:** Lasse, Lukas, Ranya are one group and they have to go out and to find (at least 5) different visible traces of WWI in the local community, city. They have to take pictures of traces they find: these can be monuments, names of streets and squares, cemeteries, museum or heritage objects, … They have to take a picture of it and write some basic information about it.

**Wednesday afternoon:** as homework assignment pupils have to look for traces and stories of WW1 in their own family history and document this in a basic way. Or someone in local community if there is no one in personal history.

**Thursday:** Publish pictures and a short summary report on a blog (twinspace?)

**The next week** the pupils compare the traces they found with the ones from the partner schools. There is a group discussion lead by the teachers on the topic (to be developed)
Lukas’ teacher and the one of his partnerschool to have VC to have a discussion with the other class. They have to prepare 3 questions which were sent in advance and give answers during the VC. They have finalize the VC with 1 common lesson learnt.: a motto or message for future generations.

The finalized Policy Maker Scenarios can be found on the CCL website: [http://creative.eun.org/scenarios](http://creative.eun.org/scenarios).
INITIAL RECOMMENDATIONS ON FOSTERING INNOVATIVE USE OF TABLETS

FOR POLICY MAKERS – CCL YEAR 2 AND BEYOND

SCENARIO DEVELOPMENT PROCESS

- Provide Learning Scenarios that give **sufficient guidance** e.g. on lesson organisation/classroom management and a **clear link to the curriculum**. Be clear about outputs - break down the end goal into smaller outputs.
- Learning Scenarios should provide **more guidance on the assessment** of teacher’ and students’ performance and different forms of assessment, e.g. self-assessment, peer assessment.
- Learning Scenarios **should nurture independent thinkers** and learners.
- Ensure that teachers are familiar with all support documents and tools.

SCENARIOS GUIDING TABLET USE

- **Be very explicit** about what is expected from teachers.
- Guide **experienced, advanced teachers** (in CCL project lead teachers) to have crucial role in explaining Learning Scenarios and providing ongoing support to other teachers.
- Guide teachers to **provide own evidence** and **reflect on their own approach**, e.g. to produce videos of their own practise.
- Guide teachers to give **special support to low ability group** of students regarding the use of tablets.
- **Collect evidence** on the benefits/ limitations of specific devices and the ‘BYOD’model.

WHOLE SCHOOL ISSUES

- Envisage **head teachers** to closely follow and support tablet initiatives/ projects at their school.
- Encourage schools to **involve parents** in the learning process supported by tablets, e.g. to develop a common framework for a questionnaire for parents to give feedback on new learning approaches like the Flipped Classroom model.
- Guide schools to think of **new learning spaces**, when designing scenarios for tablet activities.
- Facilitate possibilities for schools to allow for **more flexible timetable planning**, e.g. to schedule double lessons and multi-disciplinary approaches.
- Ensure that all **stakeholders**, e.g. industry partners, pedagogical experts and parents are involved from the beginning of a tablet project/ initiative and their **role are clear** to teachers and others.
CONCLUSIONS

The second Mainstreaming (capacity building) workshop provided an efficient platform to discuss lessons learned the first project year and to update Policy Makers’ priorities as regards the use of tablets in schools. Policy Makers discussed lessons learned from cycle 1 and identified challenges to be tackled both as regards the Learning Scenarios to be developed and whole school issues. Learning Scenarios need to be provide more guidance, clear smaller outputs and a link to the curriculum. Regarding whole school issues, the importance to connect all stakeholders (including industry partners, Pedagogical experts, school heads, parents) already at the beginning of a tablet project/initiative was stressed (see previous section: initial recommendations).

As the most important result of the workshop, three common Policy Maker Scenarios on the key priorities ‘iGroup (collaborant and assessment)’ (Annex IV), school-to-school collaboration (Annex X) and ‘Liberating learners (independent learners)’ (Annex VI) were jointly developed. All three scenarios build on lessons learned from the implementation of the first scenarios and will enable teachers to extend the learning on specific aspects of the two first year Policy Maker Scenarios ‘Collaboration’ and ‘Personalisation’. The new three Policy Maker Scenarios are the starting point for the pedagogical scenario development process within the project. On the basis of the Policy Maker Scenarios, Learning Stories are developed jointly by policy makers and lead teachers during a Pedagogical Scenario Development workshop and will be implemented and tested by the 45 CCL teachers, who start their tablet experimentations in October 2014. The finalized Policy Maker Scenarios can be accessed at: http://creative.eun.org/scenarios
ANNEX I: AGENDA 2ND MAINSTREAMING WORKSHOP

2nd Mainstreaming Workshop: Capacity Development
Final AGENDA, Brussels, 23 May, EUN Office 9.30-16.30

Objective: The second workshop for MoE partners in the project is focused on capacity development. It will draw on the conclusions and recommendations from the WP4 evaluation of the policy experimentations in year 1 in order to examine whether there have been changes to the initial set of policy challenges identified during the first workshop. Based on this transnational analysis, it will provide an initial set of recommendations for what changes participating MoE may need to make in their education systems/curricula in order to foster and sustain innovative use and large scale implementation of tablets.

During the sessions there will be one to one video interviews with MoE.

1) What were the lessons learnt from year 1 of the pilots?
2) What did you do to support schools in their pilot implementation?
3) What changes need to be implemented at school level and at system level to foster the successful integration of tablets?

Outline of objectives of the workshop Anja Balanskat (EUN)

<table>
<thead>
<tr>
<th>Outline of objectives of the workshop</th>
<th>Anja Balanskat (EUN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons learnt phase 1</td>
<td></td>
</tr>
<tr>
<td>9.30-9.45 summary on lessons learnt phase 1 (Diana Bannister)</td>
<td></td>
</tr>
<tr>
<td>9.45-10.30 lessons learnt in year 1 (Group discussions by scenario theme)</td>
<td>Challenges to be tackled/recommendations</td>
</tr>
<tr>
<td>10.30-11.00 reporting back</td>
<td></td>
</tr>
<tr>
<td>11.00-11.15 overview on current national policy challenges related to 1:1 tablet initiatives Anja Balanskat (EUN)</td>
<td></td>
</tr>
<tr>
<td>11.15-11.30 group discussion on the priorities</td>
<td></td>
</tr>
<tr>
<td>11.30-12.00 reporting back on common priorities for phase 2 (per group)</td>
<td></td>
</tr>
<tr>
<td>12.00-12.45 lunch</td>
<td></td>
</tr>
<tr>
<td>12.45-13.15 present your scenario- by country</td>
<td></td>
</tr>
<tr>
<td>13.15-15.15 grouping common themes drafting the scenario (in groups)</td>
<td></td>
</tr>
<tr>
<td>15.15-16.00 present back the scenarios (by group)</td>
<td></td>
</tr>
<tr>
<td>16.00-16.30 next steps- suggestion for pedagogical scenario development (all)</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX II: CCL POLICY MAKER PROMPT SHEET

This internal document has been prepared to support the policy development process – without of course over-influencing it! It presents a few stimulus questions, thoughts, developments, trends and issues that might be taken into account when creating scenarios.

Roger Blamire, May 2014

1. Stimulus questions

1. What major **social and religious** (where appropriate) conditions currently affect education in the school, related to social and gender equity, social services, human relationships, human capital development, etc.?

2. What major **economic** conditions currently affect education in the school, related to the structure of the economy, broad-based prosperity, the distribution of wealth and resources, etc.?

3. What major **technological** development do you foresee, related to the power and ease of use of digital devices, the availability of digital devices, networking, multimedia, social media, etc.?

4. How will education transformation contribute to / mitigate these changes?

5. How do these issues impede/advance **equal access** to education and use of educational tools, such as ICT, for disadvantaged students, students with special needs and both females and males?

6. What are past future scenarios and visions that have not materialized? Why do you think they did not come to be? What can you learn from these experiences?

---

2. RECENT STUDIES AND REPORTS

2.1 HORIZON K-12 GLOBAL AND EUROPE

In 2014 two reports from the Horizon K-12 team have been produced (not yet published though): the usual annual global report\(^3\) and a new Europe report\(^4\), both providing very useful summaries of issues and trends. The table below compares the trends, challenges and technologies identified by the two sets of advisers.

<table>
<thead>
<tr>
<th>EU</th>
<th>GLOBAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRENDS</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1-2 YEARS</strong></td>
<td></td>
</tr>
<tr>
<td>Growing Ubiquity of Social Media</td>
<td>Evolving Expectations for Teachers</td>
</tr>
<tr>
<td>Shifting Roles of Educators</td>
<td>Shift to Real-World Learning</td>
</tr>
<tr>
<td><strong>3-5 YEARS</strong></td>
<td></td>
</tr>
<tr>
<td>Integration of Online, Hybrid, and Collaborative Learning</td>
<td>Increasing Focus on Open Content</td>
</tr>
<tr>
<td>Wider Use of Open Content</td>
<td>Increasing Use of Hybrid Learning Designs</td>
</tr>
<tr>
<td><strong>5+ YEARS</strong></td>
<td></td>
</tr>
<tr>
<td>Rise of Data-Driven Learning and Assessment</td>
<td>Rapid Acceleration of Intuitive Technology</td>
</tr>
<tr>
<td>Evolution of Online Learning</td>
<td>Redesign of the Traditional School Day</td>
</tr>
<tr>
<td><strong>CHALLENGES</strong></td>
<td></td>
</tr>
<tr>
<td>Solvable</td>
<td></td>
</tr>
<tr>
<td>Integrating ICT in Teacher Education</td>
<td>Authentic Learning</td>
</tr>
<tr>
<td>Media Literacy</td>
<td>Personalizing Learning</td>
</tr>
<tr>
<td>Difficult</td>
<td></td>
</tr>
<tr>
<td>Blending of Formal and Informal Learning</td>
<td>Complex Thinking and Communication</td>
</tr>
<tr>
<td>Real World Learning</td>
<td>Increased Public and Policy Concern about Privacy</td>
</tr>
<tr>
<td>‘WICKED’ [I.E. MORE THAN DIFFICULT TO FIX]</td>
<td></td>
</tr>
<tr>
<td>Complex Thinking and Communication</td>
<td>Competition from New Models of Education</td>
</tr>
<tr>
<td>Students as Co-Designers of Learning</td>
<td>Keeping Education Relevant</td>
</tr>
<tr>
<td><strong>TECHNOLOGIES</strong></td>
<td></td>
</tr>
<tr>
<td>1-2 YEARS</td>
<td></td>
</tr>
<tr>
<td>Cloud Computing</td>
<td>BYOD</td>
</tr>
<tr>
<td>Tablet Computing</td>
<td>Cloud Computing</td>
</tr>
</tbody>
</table>

\(^3\) [http://k12.wiki.nmc.org](http://k12.wiki.nmc.org)  
\(^4\) [http://europe.wiki.nmc.org](http://europe.wiki.nmc.org)
2.2 UK SCENARIOS

A new group, ETAG, has been set up to advise the minister on technology in education. A set of scenarios for the future of education 2025 have been published and comments invited:

2.3 MAINSTREAMING ICT-ENABLED INNOVATION

A recent IPTS study recommended a series of policy actions to mainstream ICT innovation in seven areas: Content and curricula, Assessment, Professional development, Research, Leadership, Connectedness and Infrastructure.

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5 heppell.net/etag/2020.html
3. Trends, Challenges and Opportunities

3.1 Teaching and Learning

Designing learning, Universal Design for Learning

Adopting a more principled, design-based approach to teaching and learning processes might offer a solution to enabling practitioners to make more informed choices about their creation of learning interventions and better use of good pedagogy and new technologies.7

“By designing learning environments from the outset to meet the challenge of individual differences, including the challenges of students with disabilities, we make better learning environments for everyone.”8

Universal Design for Learning = Provide multiple means of representation, action and expression, and engagement.9

Teachers make the difference

“A good teacher can get 1.5 years of learning growth; a bad teacher gets half a year of learning growth and having four consecutive years of high quality teaching can eliminate any trace of economic disadvantage. Even twenty years after leaving school, the pupils of great teachers are still doing markedly better in life.”10

Student (and teacher) competences

New Pedagogies for Deep Learning lists seven competences (NB digital competence leverages all of them):

- Critical thinking and knowledge construction
- Real world problem-solving
- Collaboration
- Communication
- Character [i.e. traits like self-reliance, resilience, coping with setbacks]
- Global citizenship
- Creativity and imagination

8 D Rose 2009 tweet 11 4 14: https://twitter.com/UDL_Center/status/454688874212892672/photo/1
9 http://www.udlcenter.org/aboutudl/whatisudl
10 Eric Hanushek, Hoover Institution, Stanford University (commissioned by OECD)
21st century competences can be grouped into three types: cognitive skill (e.g. knowledge construction or problem-solving), inter-personal skill (e.g., collaboration) and intra-personal skill (e.g., self-regulation). Self-control is more closely correlated with success than either IQ or social class.¹¹

“70% of young people believe they will have to acquire digital skills after leaving education because current education systems do not prepare them for work.”¹²

**CURRICULUM AND ASSESSMENT**

Japan has taken 30% of content out of curriculum to allow for deeper learning.

Michael Fullan has compared current and future assessment approaches¹³:

<table>
<thead>
<tr>
<th>CURRENT ASSESSMENT PARADIGM</th>
<th>NEXT GENERATION ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top down and driven by system needs</td>
<td>Bottom up and driven by student learning needs and aspirations</td>
</tr>
<tr>
<td>Over-emphasis on grading and scoring student performance</td>
<td>Greater emphasis on monitoring student progress and generating feedback to improve teaching and learning</td>
</tr>
<tr>
<td>Over-reliance on limited responses elicited to 30-60 decontextualized multiple choice or short, closed response items mostly involving low cognitive demand processes</td>
<td>Greater use of assessment tasks embedded into learning activities requiring deep engagement and deep learning</td>
</tr>
</tbody>
</table>

¹¹ Daniel Goleman Focus, Times 9 Nov 2013
¹³ [http://app.newpedagogies.net](http://app.newpedagogies.net)
All students of the same age cohort take the same test at the same time regardless of readiness | Personalized assessments adapted to students’ readiness and interests

Little feedback, few clues as to what to do next and too late | Use of data analytics and other sources such as peer review to generate instant, real-time actionable feedback on multiple indicators

Many key student learning outcomes not amenable to paper-and-pencil testing ignored | Assessment of the full range of outcomes, including higher-order cognitive skills and a range of intra- and inter-personal skills

**“ASSESSMENT FOR LEARNING”:** Assessment can support the process of learning, not just measure its outcomes. In diagnostic testing with rapid feedback, the results of summative computer-based assessment are provided immediately to learners and teachers, then used as a basis for addressing misconceptions and providing supplementary teaching. Research from computer games has explored how continuous feedback can guide performance and improve motivation. This requires software to monitor how learners progress through the course materials, diagnose misconceptions, know when to intervene, and offer appropriate advice. A teacher can be provided with a ‘dashboard’ that displays the progress of each student and offers a range of actions from simple automated prompts to online student-tutor conversation. Students can be offered ‘open learner models’ that show their progress in relation to peers.

**BADGES TO ACCREDIT LEARNING:** Badges offer a way of accrediting non-formal learning. A badge, analogous to a Scout badge, is awarded when a learner completes a task or challenge that demonstrates a learning achievement. Badges may be awarded by authorities, by peers, or may be automatically assigned on completion of certain tasks. Badge systems have been used to encourage participation in online help forums and to acknowledge expertise in gaming environments. New approaches support the collection and validation of badges for learning, and work is in progress to develop an infrastructure to award, manage and validate badges.”

In Korea students are being fitted with wearable devices that monitor heart rate, stress levels, attention etc. so that teachers can see instantly who is struggling.

---


15 Prof. Peck Cho, UNESCO conference, Paris April 2014
3.2 TECHNOLOGY

AMBIENT DATA, BIG DATA, CLOUD SERVICES

"Combine ambient data on just about any physically manufactured object — from car tires and milk cartons to shipping containers and test tubes — with pervasive wearable technologies that constantly present us with dashboards, notifications, analyses, and visualizations of all this data, and you have a workplace that will rapidly turn into a contemporary cybernetic amalgamation that was previously only the purview of science fiction." 16

MOBILE FIRST

When it comes to planning for technology use in education in 2014 and beyond, let's not drive by looking in the rear view mirror. Let's consider a 'mobile first' approach to technology in education. This means a personal, connected approach. 17

DISRUPTION

[The power of emerging technology] "is characterized by the rise of highly intelligent and connected machines that will assume an increasing portion of the specialized and analytical tasks previously performed by white collar professionals (e.g. accountants, researchers, news writers). Wherever possible, software will digitize physical atoms into virtual bits across all parts of the economy and in our lifestyles. Following the footsteps of disrupted sectors (e.g. retail, music, publishing, media, marketing), many brick-and-mortar industries (e.g. education, healthcare, financial services, home appliances, energy) will be disrupted and re-imagined. Therefore, there will be abundant demand for 4I (imagination, invention, innovation, influence) type of skill sets in the coming decades to roll out these changes (Machines cannot do any of the 4Is well)."

16 Via Harold Jarche
### Annex III: Pilot/Scenario Themes Prioritized by CCL Partners for a Second Round of Pilots

#### MOE Tablet Priorities Second Cycle

**Questionnaire**
- Replied: AT, BE Flanders, CZ, IT, SI, PT, UK
- Missing: BE Wallonia, LT

**Policy Maker Scenarios**
- Sent: AT, BE Flanders, CZ, IT, PT, UK
- Missing: BE Wallonia, LT, SI

#### High Priority Questionnaire

<table>
<thead>
<tr>
<th>Topic</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of digital resources</td>
<td>(4) Austria, Belgium Flanders, Italy, Portugal</td>
</tr>
<tr>
<td>BYOD (Bring Your Own Device) strategies</td>
<td>(4) Austria, Belgium Flanders, Czech Republic, Italy</td>
</tr>
<tr>
<td>Supporting informal, non-formal learning opportunities (out of school use, home use of tablets)</td>
<td>(4) Czech Republic, Italy, Portugal, Slovenia</td>
</tr>
<tr>
<td>Lesson organization and classroom management</td>
<td>(4) Belgium Flanders, Czech Republic, Italy, Portugal</td>
</tr>
<tr>
<td>Subject specific use</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Interdisciplinary use</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Cloud Computing strategies</td>
<td>(3) Czech Republic, Italy, Slovenia</td>
</tr>
<tr>
<td>Exploring new forms of assessment</td>
<td>(3) Italy, Portugal, Slovenia</td>
</tr>
<tr>
<td>Integration with other technologies: IWBs</td>
<td>(2) Czech Republic, Italy</td>
</tr>
<tr>
<td>Investigating funding, ownership and access models</td>
<td>(2) Czech Republic, Belgium Flanders</td>
</tr>
<tr>
<td>Creation of digital resources</td>
<td>(1) Italy</td>
</tr>
<tr>
<td>Integration with other technologies: VLEs</td>
<td>(1) Italy</td>
</tr>
<tr>
<td>Engaging other actors in the process of learning (libraries, museums, local business)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

* UK did not mention any high priority topic, only medium priority *(Use of digital resources, Creation of digital resources, subject specific use, interdisciplinary use)*
OTHER TOPICS MENTIONED IN QUESTIONNAIRE

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of tablet for inclusion</td>
<td>Italy</td>
</tr>
<tr>
<td>Provision of more bandwidth and fiber to schools</td>
<td>Belgium Flanders</td>
</tr>
<tr>
<td>Changing regular education (first tests are running) into 2/5 to 3/5 Education System: 2/5 in Group work/ free learning, 3/5 traditional learning each week</td>
<td>Austria</td>
</tr>
<tr>
<td>Technical support of ICT using in schools (school wifi, free internet access for students, safety)</td>
<td>Czech republic</td>
</tr>
<tr>
<td>Implementing the use of e-textbooks, e-materials and evaluation of it</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Coding skills, interest in MOOCs (not really relevant to schools), 3D Printers</td>
<td>UK</td>
</tr>
</tbody>
</table>

COMMENTS QUESTIONNAIRE

AUSTRIA: BYOD strategies more and more important. Austrians BMFB is currently testing cloud computing.

BELGIUM FLANDERS: Teachers invest a lot of time in content creation, discussions with publishers are ongoing. BYOD a well as funding strategies are high on the list of policy priorities.

CZECH REPUBLIC: As for BYOD devices schools need administrative background (insurance, responsibility etc). BYOD strategy should be supported by the higher of local business companies. To simplify teachers work, we would appreciate a platform suitable for all devices starting from tablets to IWB being developed specifically for schools and based on school license.

2014 POLICY MAKER SCENARIOS

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D printing – use in all grades and most subjects</td>
<td>Austria</td>
</tr>
<tr>
<td>2/3 and 3/5 weekly lessons – 2 days individualised/ free and group learning, three days traditional learning</td>
<td>Austria</td>
</tr>
<tr>
<td>Use of mobile technology for engaging project work about remembrance education</td>
<td>Belgium Flanders</td>
</tr>
<tr>
<td>School to school (student to student) collaboration</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>Inclusive learning using tablets</td>
<td>Italy</td>
</tr>
<tr>
<td>Assessment and Evaluation</td>
<td>Italy</td>
</tr>
<tr>
<td>Changing assessment, changing learning</td>
<td>Portugal</td>
</tr>
<tr>
<td>Nurture independent learners and thinkers</td>
<td>UK</td>
</tr>
</tbody>
</table>
2014 Leading Edge Scenarios

Emotionally Tablet-based Learning Environment (Portugal)

Bringing Intra- and Interpersonal Intelligence to a Technology-saturated Learning Environment

| Aim: | Provide students with intra-and interpersonal skills which will redress the balance between what may become an “individualistic” technology and a “wholesome social and learning environment”, leading to more mature and hence more motivated, cooperative and self-regulated students. This may lead to better, more stable knowledge and skills learning. |
| Implementing the scenario: | Can be done via two frameworks (a) Gardner’s Theory of Multiple Intelligences; (b) Emotional Intelligence as defined and... by Daniel Goleman and others. |
| Activities: | The scenario involves redesigning cognitive tasks to embed “emotionally-driven” activities which can be intrapersonal and/or interpersonal. |

Immersive Learning (UK)

Deploying Immersive Learning Environments, Spaces and Experiences to Nurture Independent Learners and Thinkers

| Aim: | Children sometimes find it hard to collaborate and immersive learning approaches help develop those important skills. Children may find learning in an immersive context more authentic than traditional didactic learning. |
| Implementing the scenario: | To explore the impact of collaborative learning of immersive learning approaches. |

What Have You Learned from the First Round of Scenarios?

Austria: (1) Children like to have a kind of “hands on” where they can see what they have “produced” e.g. in Mathematics, technology etc. This gives an additional kick to them. (2) Flipped Classroom offered the scenario for group learning, but the next step is a defined learning period per week.

Belgium Flanders: Based on the CCL observations I think that the 2 main benefits of using tablets are: mobility and multimedia. I try to combine these 2 benefits in a project work about remembrance education (more detailed feedback in scenario).

Czech Republic: Scenario personalisation enabled piloting schools to improve simple use of tablets, students are able to use tablets as a personal device for storing homework, create short videos, photos, text. Teachers became familiar with 1:1 strategy in education. We would like to move one step ahead and make students communicate to each other with the help of tablets while in scenario 1 the communication was mostly on students to teacher base. In the second pilot year we would like to make students communicate also outside the classroom. In this point the using of tablets becomes unique.

Italy: From the comments we received by the teachers, especially the lead teacher, we observed that other topic could be used for new scenarios. It would be useful to have tangible output (documentation, videos, etc.) in order to give evidence to what is being reported (event granular activity moments not only the whole
learning activity). That is why the desired output can be a video documenting activities or narrating shortly the learning story.

**PORTUGAL:** By implementing the first scenario, we felt that real time feedback given by teachers would improve students’ results and enhance their motivation to learn, as it will be less common for them to lag behind. On the other hand, we also felt that there was a mismatch between tasks and assessment.

**UK:** (1) we need to prepare the students well for the programme, as some struggled initially with the hardware and the software used and this delayed starting the process. (2) There may be a significant benefit in getting the parents more involved. (3) It’s important we are clear on how to document and evidence the learning that takes place – partly for the students themselves but also to show School Inspectors as part of our inspection regime. (4) It is important that we consider how feedback is provided to students and how we measure the impact that feedback has had upon learning goals. (5) The UK teachers really liked the CCL framework, especially the “ask” phase.

**POSSIBLE POLICY MAKER SCENARIOS EMERGING:**

*Questionaire & draft scenarios*

- **Collaboration** (Austria, Belgium Flanders, Czech Republic)
- **BYOD strategies** (Austria, Belgium Flanders, Czech Republic, Italy)
- **Use of digital resources** (Austria, Belgium Flanders, Italy, Portugal)
- **Lesson organization and classroom management** (Belgium Flanders, Czech Republic, Italy, Portugal)
- **Supporting informal, non-formal learning opportunities** (Czech Republic, Italy, Portugal, Slovenia)
- **Exploring new forms of assessment** (Italy, Portugal, Slovenia)
- **Subject specific use/ interdisciplinary use** (Czech Republic, Italy, Slovenia)
- **3D Printing** (Austria, UK)
### Scenario facts

**PROJECT:** Creative Classrooms Lab  
**TOPIC:** Collaboration & Assessment  
**AUTHORS:**  
Bernard Racz (Austria)  
Silvia Panzavolta (INDIRE)  
Anita Poberznik (Slovenia)  
**DEVELOPED:** 2nd Mainstreaming workshop 23 May 2014, Brussels  
**TO BE IMPLEMENTED:** Pilot Cycle 2 (October 2014 – January 2015)
Background

During the second Mainstreaming workshop of the project in May 2014 in Brussels, CCL policy makers developed three Policy Maker Scenarios on the topics collaboration & assessment, school-to-school collaboration and liberating learners (independent learners).

On the basis of the Policy Maker Scenarios, policy makers and lead teachers developed Learning Stories together during a Pedagogical Scenario Development workshop in June 2014. Finally, all the CCL teachers will derive their Lesson Plans from these Learning Stories.

This outcome of this process will guide the CCL teachers in the use of the tablets during the second round of pilots starting in October 2014. Hence, this Policy Maker Scenario serves as the basis for the Learning Stories and Lesson Plans guiding the use of tablets on the topic Collaboration & assessment.

CCL Project Lifecycle

1st Mainstreaming workshop May 2013

Development of the first set of Policy Scenarios and Learning Stories Jun - Sep 2013

First round of classroom pilots using the developed Scenarios and Learning Stories Nov 2013 - Apr 2014

Initial observation results and 2nd Mainstreaming workshop Jun 2014

Development of the 2nd set of scenarios and Learning Stories based on the initial results May- Sep 2014

Final observation results and 3rd Mainstreaming workshop Mar 2015

Second round of school pilots with the new set of scenarios Oct 2014 - Jan 2015
**Theme of the scenario & Title**

- **Theme:** Collaboration and Assessment
- **Title:** “iGroup” – Tracking the individual progress in a group

**Challenges the Scenario is Responding to**

The challenges are:

- **For teachers:** how to track the individual contribution of a student to the group
- **For students:** feedback and reflection of each student’s work, how to develop personal competences and analytical/presentation/critical thinking/interact skills

**Brief Description of the Scenario**

<table>
<thead>
<tr>
<th>What is the main objective?</th>
<th>to explore in the context of the curriculum and subject the possibilities of the media option of a tablet in order to track individual progress (e.g. taking pictures, record audio or video) within a group of peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age level of the students</td>
<td>+ grade 7</td>
</tr>
<tr>
<td>Number of classrooms/schools involved</td>
<td>5</td>
</tr>
</tbody>
</table>

**Features of the Scenario**

**First ideas of the scenario in practice**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Physical Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a task with objectives, roles who is doing what and a clear target.</td>
<td>In school and out of school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>People &amp; Roles</th>
<th>Resources (including technologies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher defines the task, each student gets a role and tracks his/her progress. Feedback is given within the group and from other students outside of the group. The teacher evaluates the individual progress within the group and the overall group performance.</td>
<td>Tablets and a presentation device, WiFi and internet connection, learning management system for sharing the inputs.</td>
</tr>
</tbody>
</table>
**Narrative**

Linda is given by her teacher as **task to produce a video** (with the help of her group) about the travel restrictions during World War I. **Her role within her group** is to be the **reporter** for research, storyboard, etc. and documentation/desk research/interviews/etc. The group consists of a video maker, a writer of the video script, a coordinator of the group (timetable, organizing the required venue, etc.) and an editor (proof reading).

Linda has to reflect on her own contribution and **to send an interim report** (on pro and cons on the contributions of her peers) on a regular basis to the teacher. The **teacher gives feedback** to Linda and advises her how to tackle group problems and about her performance.

The group has to **discuss the feedback** and **adjust the project** accordingly. Linda’s group presents their product to the other groups. Linda’s group has to give feedback on the other products and individual performance of group members.

**The teacher gives final feedback** to all groups and each individual student about reaching the target, competences of each student etc.

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The work presented on this document is supported by the European Commission’s Lifelong Learning Programme – project Creative Classrooms Lab (Grant agreement 2012-5124/005-001). The content of this document is the sole responsibility of the consortium members and it does not represent the opinion of the European Commission and the Commission is not responsible for any use that might be made of information contained herein.
ANNEX V: CCL POLICY MAKER SCENARIO SCHOOL-TO-SCHOOL COLLABORATION

USE OF MOBILE TECHNOLOGY FOR ENGAGING PROJECT WORK ABOUT REMEMBRANCE EDUCATION

Scenario facts

PROJECT: Creative Classrooms Lab
TOPIC: School-to-school collaboration
AUTHORS:
Jan de Craemer (Belgium Flanders)
Nisdi Ouahdi (Belgium Wallonia)
Pavla Sabatkova (Czech Republic)
DEVELOPED: 2nd Mainstreaming workshop 23 May 2014, Brussels
TO BE IMPLEMENTED: Pilot Cycle 2 (October 2014 – January 2015)


**Background**

During the second Mainstreaming workshop of the project in May 2014 in Brussels, CCL policy makers developed **three Policy Maker Scenarios** on the topics collaboration & assessment, school-to-school collaboration and liberating learners (independent learners).

On the basis of the Policy Maker Scenarios, policy makers and lead teachers developed **Learning Stories** together during a Pedagogical Scenario Development workshop in June 2014. Finally, all the CCL teachers will derive their **Lesson Plans** from these Learning Stories.

This outcome of this process will guide the CCL teachers in the use of the tablets during the **second round of pilots** starting in October 2014. Hence, this Policy Maker Scenario serves as the basis for the Learning Stories and Lesson Plans guiding the use of tablets on the topic **school-to-school collaboration**.

### CCL Project Lifecycle

- **1st Mainstreaming workshop** May 2013
- Development of the first set of Policy Scenarios and Learning Stories **Jun - Sep 2013**
- First round of classroom pilots using the developed Scenarios and Learning Stories **Nov 2013 - Apr 2014**
- Initial observation results and 2nd Mainstreaming workshop **Jun 2014**
- Development of the 2nd set of scenarios and Learning Stories based on the initial results **May- Sep 2014**
- Final observation results and 3rd Mainstreaming workshop **Mar 2015**
- Second round of school pilots with the new set of scenarios **Oct 2014 - Jan 2015**
**Theme of the Scenario & Title:**

- **Theme:** Use of mobile technology for engaging project work about remembrance education
- **Title:** School-to-school collaboration

**Aim of the Scenario - What does it aspire to do or change?**

- Based on the CCL observations there are *2 main benefits* of using tablets: *mobility* and *multimedia*. We try to combine these 2 benefits in a project work about remembrance education.
- School collaboration can *improve different skills* and competences such as *team work, cultural competences, language learning*, etc.
- This scenario should provide teachers with ideas about how to use mobile devices to work around a topic (may be remembrance education (RE) but it can be anything)

**Brief Description of the Scenario**

| What are the Main Objectives? | • students from different classes present to each other in a visual way  
• students are learning from each other’s approach  
• common lesson planning by teachers (requires cooperation from teachers) |
|---|---|
| Where do tablets come in? | • collaboration apps on tablet such as skype, snapchat,…  
• presenting tools such as speaking avatars (Morfo app)  
• see Learning Story (for instance go to the museum, interview someone,…)  
• inquiry, research and data collection: e.g. pictures of traces of world war I |
| Assessment or Evaluation | • to tackle difficult issues such as remembrance, and draw lessons from what we learnt from the past  
• to provide useful assignments in the field RE as project work  
• to engage students in detecting traces of historical events in their local environment and personal histories  
• to teach students about the variety of historical resources and to discriminate the value of different resources |
| Classrooms/Schools Involved | • **Age level:** all levels of secondary education  
• **Subjects:** can be everything  
• **In case of RE:**  
  o History  
  o Citizenship is a cross-curricular topic  
• RE is a cross-curricular topic |
### FEATURES OF THE SCENARIO

#### FIRST IDEAS OF THE SCENARIO IN PRACTICE

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>PHYSICAL ENVIRONMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• provide assignments using tablets</td>
<td></td>
</tr>
<tr>
<td>• presenting themselves to others</td>
<td></td>
</tr>
<tr>
<td>• specific assignments depending on topic</td>
<td></td>
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<tr>
<td>• presenting project outcomes to other groups/classes</td>
<td></td>
</tr>
</tbody>
</table>

#### ASSIGNMENTS IN CASE OF REMEMEBRANCE EDUCATION:

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>• Students have to find (at least 5) different traces of WWI in the local community, city. They have to go out in pairs or small groups and take pictures of traces of the first WW: these can be monuments, names of streets and squares, cemeteries, museums or heritage objects, ... They have to take a picture of it and write some basic information about it.</td>
<td>In the local community (during schooltime)</td>
</tr>
<tr>
<td>• Interview one stakeholder about the WW in their city or community. This can be someone from a heritage organization, a local museum or someone from the cities monuments department.</td>
<td>In the local community (during school time)</td>
</tr>
<tr>
<td>• Students have to look for traces and stories of WWI in their own family history and document this in a basic way</td>
<td>in the local community (for homework)</td>
</tr>
<tr>
<td>• Publish content (traces) on a blog (twinspace?)</td>
<td>at home for homework</td>
</tr>
</tbody>
</table>

#### PEOPLE & ROLES

**TEACHERS:**

- to look for partner schools and initial contacts
- preparation of collaboration
- to communicate with other schools
- to guide students activities (group work)
- to provide input and resources
- to assign group and home work
- to give a basic instruction
- to share materials and publish results
- to evaluate

**STUDENTS**

- to present themselves to other classes in a digital way

#### RESOURCES (INCLUDING TECHNOLOGIES)

**FOR THE TEACHERS:**

- national pedagogical guide for RE
- The Remembrance Education database www.klascement.be/herinneringseducatie
- Victims database (De Namenlijst)
- 

**TECHNOLOGY**

- mobile device with camera, multimedia
- presenting apps – speaking avatars
**D7.2 Report on second Mainstreaming Workshop: Capacity Development**

| to perform research activities in and outside school | common channel for display of results: twinspace, blog,... |
| to do homework – to look for experts | communication apps such as skype,... |
| to collect or create digital learning resources (traces) | note taking software or Text processor |
| to present project outcomes to other classes/groups | |

**REMOTE EXPERTS**
- can be someone from a heritage organization, a local museum or someone from the cities monuments department.
- to provide input through interviews

**NARRATIVE**

**Monday:** Lasse, Lukas, Ranya and their fellow students have to create a speaking avatar in English of themselves using the Morfo app where they put in their own recording about who they are, where they live, what their hobbies are and how old they are. At the end of the lesson students publish their speaking avatar to twinspace. Later on they look at the avatars from the partner school.

**Wednesday morning:** Lasse, Lukas, Ranya are one group and they have to go out and to find (at least 5) different visible traces of WWI in the local community, city. They have to take pictures of traces they find: these can be monuments, names of streets and squares, cemeteries, museums or heritage objects, ... They have to take a picture of it and write some basic information about it.

**Wednesday afternoon:** As homework assignment students have to look for traces and stories of WW1 in their own family history and document this in a basic way, or someone in the local community if there is no one in personal history.

**Thursday:** Publish pictures and a short summary report on a blog (twinspace?).

The next week the pupils compare the traces they found with the ones from the partner schools. There is a group discussion lead by the teachers on the topic (to be developed).

Lukas’ teacher and the one of his partner school to have a video conference to have a discussion with the other class. They have to prepare 3 questions which were sent in advance and give answers during the video conference. They have to finalize the video conference with 1 common lesson learnt: **a motto or message for future generations.**
ANNEX VI: CCL POLICY MAKER SCENARIO:
LIBERATING LEARNERS (INDEPENDENT LEARNERS)

Scenario facts

**PROJECT:** Creative Classrooms Lab

**TOPIC:** Liberating learners (independent learners)

**AUTHORS:**
Mantas Masaitis (Lithuania)
Fernando Franco (Portugal)
Valerie Thompson (UK)

**DEVELOPED:** 2nd Mainstreaming workshop 23 May 2014, Brussels

**TO BE IMPLEMENTED:** Pilot Cycle 2 (October 2014 – January 2015)
Background

During the 2nd Mainstreaming workshop of the project in May 2014 in Brussels, CCL policy makers developed three Policy Maker Scenarios on the topics collaboration & assessment, school-to-school collaboration and liberating learners (independent learners).

On the basis of the Policy Maker Scenarios, policy makers and lead teachers developed Learning Stories together during a Pedagogical Scenario Development workshop in June 2014. Finally, all the CCL teachers will derive their Lesson Plans from these Learning Stories.

This outcome of this process will guide the CCL teachers in the use of the tablets during the second round of pilots starting in October 2014. Hence, this Policy Maker Scenario serves as the basis for the Learning Stories and Lesson Plans guiding the use of tablets on the topic Liberating learners (independent learners).

CCL PROJECT LIFECYCLE
Theme of the Scenario & Title

- **Theme:** Liberating learners (independent learners):
- **Title:** “iGroup” – Tracking the individual progress in a group
  - The development of independent learning and thinking through real life (authentic) tasks and learning beyond the classroom walls.

Brief Description of the Scenario

**What is the main objective?**
- to increase the independent learning skills of the students

**Age level of the students**
- Portugal: 7 - 18 years
- UK: depends on timetable in schools
- Lithuania: 12 – 16 years

**Number of classrooms/schools involved**
- Portugal 5 schools, UK 5 schools, Lithuania 5 schools

Features of the Scenario

First ideas of the Scenario in practice

**Activities**
- peer to peer sharing/mentoring
- students develop a learning vocabulary
- develop positive learner attributes and preferences and dispositions
- project work with authentic basis
- develop guidelines for teachers to let go!
- assessment tools including self-assessment
- reflection

**Physical Environment**
- in the classroom
- outside the classroom
- at home

**People & Roles**
- parents and local community figures - engagement, personal knowledge
- external experts - feedback
- teachers
- students

**Resources (including technologies)**
- self-cognition tools
- de Bono thinking hats
- Solo taxonomy
- Kipling questions
- Tablets! Ideally one each, 24/7
- means to store, retrieve and organise students’ work
- digital libraries
- student generated resources
- local community
Mrs Franco has a class of 25 students for her geography class. At the start of term she asks them to complete a self-assessment tool to help her understand their learning style, and approach to their learning. Using this information she designs a programme of learning that will encourage the students to take responsibility for their own learning.

Students are not confined to the classroom, and are encouraged to find resources and information from within their own family and their local community as well as digital resources such as the Internet, etc.

Her role is to define the objective or goals of the project, to encourage and assist, to feedback regularly, but not to spoon feed the students.

Students can choose to work alone or in groups but are expected to be ready to present their work at an agreed point.

The teacher will have briefed the parents in advance of what the project will be about, what the students are expected to do, and how parents can help.

The role of the teacher is to support at an individual level.