POLICY MAKER SCENARIO

FLIPPED CLASSROOM

Scenario facts

PROJECT: Creative Classrooms Lab
TOPIC: Flipped Classroom
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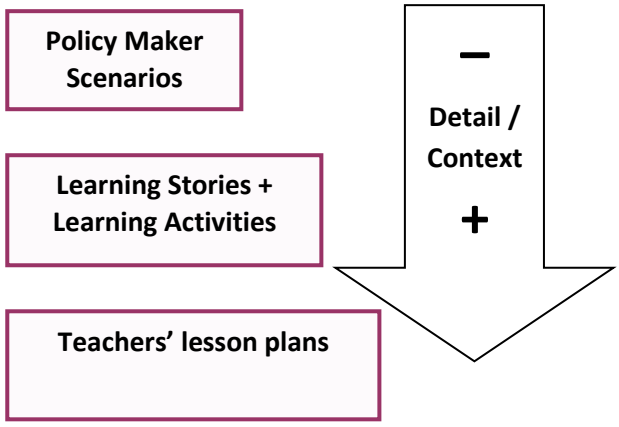
BACKGROUND

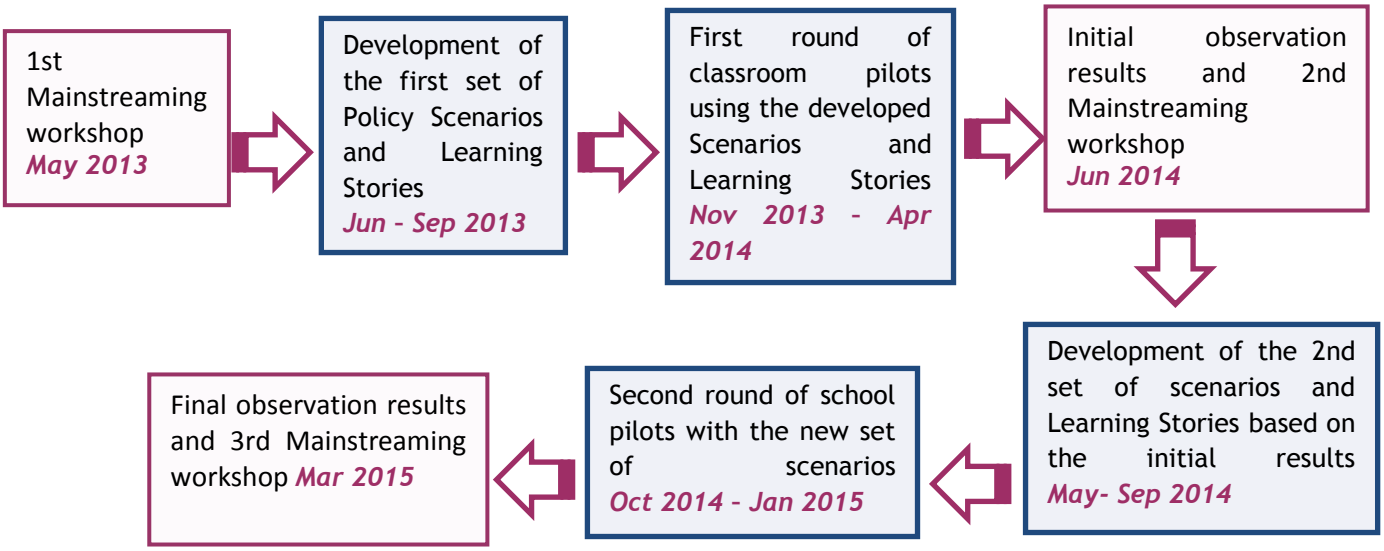
During the 1st Mainstreaming workshop of the project in May 2013 in Brussels, CCL policy makers developed **four Policy Maker Scenarios** on the topics personalisation, collaboration, content creation and Flipped Classroom.

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 2013. 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 **first round of pilots** starting in November 2013. Hence, this Policy Maker Scenario serves as the basis for learning stories/ activities and lesson plans guiding the use of tablets on the topic **Flipped Classroom**.



CCL PROJECT LIFECYCLE



POLICY MAKER SCENARIO: FLIPPED CLASSROOM

CHALLENGES THE SCENARIO IS RESPONDING TO

The challenges are to:

- engage disengaged learners
- address the home-school divide
- for the school to keep the pace with more flexible and engaging methods in order to:
    - meet students' needs
    - fully exploit the potential of ICT

WHO IS INVOLVED IN THE SCENARIO? WHAT ARE THEIR ROLES?

- students
- teachers
- parents

WHAT TECHNOLOGY IS USED IN YOUR SCENARIO? HOW IS IT USED?

- tablets
- apps *(e.g. note taking, 3D images)*
- software *(e.g. DisplayNote)*
- email
- virtual learning environment

WHAT IS THE CORE PURPOSE OF YOUR SCENARIO?

Why would those involved decide to change their practice? In response to which particular challenges or opportunities?

- flipping the classroom away from the teacher's full control
- **student empowerment** and **"self-sustainability"**
- formative assessment as a pathway to success

WHERE DOES THE SCENARIO TAKE PLACE?

- in the classroom
- outside of the classroom during after school activities

WHEN DOES THE SCENARIO TAKE PLACE?

- at home *(for class preparation)*
- at school *(during class)*

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Lifelong Learning Programme

WHAT HAPPENS?

At home:	

Students:	• in preparation of the biology class:
	  • to watch a video
	  • to identify an app suitable for note taking
	  • to take key notes, each on a different organ of the human body
	• in addition:
	  • to do homework for other lessons
	  • to receive information from the teacher, e.g. on school club activities

During class:	
Teacher:	• to discuss with the class how to take notes; present examples of students' notes • to ask each group to identify the key facts about the organ and any missing information • to make assessments of the students' work and records in their digital profile
Students:	• to form groups with other students having prepared other organs • for each group to prepare a presentation for the rest of the class *(including videos)*

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ONE TYPICAL SCHOOL DAY FOR PEDRO

It is Tuesday morning and Pedro *(13 years)* knows that he must check his lesson task board on his online profile, in **preparation for the Science lesson** on Thursday. The task board says that at home he must watch two videos and take key notes. The videos are about the organs of the human body. He links to the videos directly via the online learning environment and has access to a relevant website on his tablet. He notes that there is a message from his tutor to see if he wants to express interest in the new after school arts club and he forwards it to his parents for approval.

There is also a reminder on his task board to prepare the next **Mathematics lesson.** This is to take photos of ten bottles separately showing their capacity. He is slightly confused about changing litres to millilitres, but this is the objective of tomorrow's lesson and he will ask the teacher. Pedro found it really helpful last week that the teacher gave him some targets throughout the lesson and showed the types of questions that he will need to be able to do for the next level.

It takes Pedro only a few minutes to watch the **video for the Science lesson**, but it takes him longer to make notes and to watch the video a second time, just to be sure that he has enough information. The teacher has asked the students to find an appropriate app to take notes and Pedro downloads a new app called *Picture Note* which allows him to draw his own diagrams into the notes. He also makes a quick mind map.

On **Thursday in the Science lesson**, the teacher first has an initial discussion with the students about how to take key information from a video and asks the students to share examples of their notes. The teacher is pleased because Pedro has paused the video at particular sections and linked a digital post it note and diagrams using *Picture Note.* He explains to his teacher that he finds it easier to take notes using pictures.

Then, the teacher asks each group of four to identify the key facts about their organ. **During the lesson**, each group must check their notes with each other and identify any gaps. After this, the teacher asks them to form a different group with other students who have been working on different organs. Pedro joins with two others *(one has been working on the liver and the other on kidneys*). The students have to work collaboratively on a presentation for the rest of the class. This can be done using Display note which allows the students to work on their presentation and the teacher to make regular assessments throughout the lesson by bringing the work onto the centrally display and highlight significant points. This is really helpful to Pedro's group as they see that another group has included a video and decide to do this as well. Pedro loves rhythmical sound and manages to find a website with drums which sound like the human heart beat. One of the other groups focuses on 3D images and does a presentation with a 3D app. They create a voice over to their rotating human body with an Avatar.

At the end of the lesson, Pedro is pleased because he got much more support from his teacher in the lesson. He was able to share his key questions and show how much preparation he has done. He feels confident that the key questions and the presentation with the others will help him to revise for the test in two weeks time. During the lesson, the teacher was able to recognise that he had identified a good app for note taking and has shown his drawings as an example, using the interactive projector. The teacher made some assessments of his work and recorded this in her digital profile of him. Pedro knows that his work has really improved this year, as he finds it much easier to focus on the class time activities.

APPENDIX 1: iTEC INNOVATION MATURITY MODEL

The iTEC Innovation Maturity Model has been developed in the framework of the iTEC project (http://itec.eun.org).The model shows a number of **progressive stages of innovation maturity of an institution**, e.g. school. As educational institutions move from one stage to the next in the direction of the arrow, the innovation maturity of the institution progresses, e.g. the implementation of a scenario that moves an institution from the 'Exchange' stage of the model to the 'Enrich' stage would be defined as innovative in that institution's context. In this **self-assessment activity** an organisation's/institution's stakeholders and/or workshop participants identify the organisation's current position on the maturity model. The aim of the self-assessment (which was part of the first CCL Mainstreaming workshop in May 2013) is to reflect on the aim of introducing new technologies in school and to ensure through this process the quality of produced scenarios.

The stage of the innovation

5	**Empower** Redefinition & innovative use	○ Technology supports new learning services that go beyond institutional boundaries. ○ Mobile and locative technologies support 'agile' teaching and learning . ○ Learner as co-designer of the learning journey, supported by intelligent content and analytics.
4	**Extend** Network redesign & embedding	○ Ubiquitous, integrated, seamlessly connected technologies support learner choice and personalisation beyond the classroom. ○ Teaching and learning distributed, connected and organised around the learner. ○ Learners take control of learning using technology to manage own learning.
3	**Enhance** Process redesign	○ Teaching and learning 'redesigned ' to incorporate technology, building on research in learning and cognition. ○ Institutionally -embedded technology supports the flow of content and data, providing an integrated approach to teaching, learning and assessment. ○ Learner as 'producer ' using networked technologies to model and make.
2	**Enrich** Internal Coordination	○ Technology used interactively to make differentiated provision within the classroom. ○ Technology supports a variety of routes to learning. ○ Learner as 'user' of technology tools and resources.
1	**Exchange** Localised use	○ Technology used within current teaching approaches. ○ Learning is teacher-directed and classroom-located. ○ Learner as 'consumer' of learning content and resources

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