Scenario Title:
Investigating the creation and use of interactive content

<table>
<thead>
<tr>
<th>Countries: Belgium Flanders, Italy</th>
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<table>
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<tr>
<th>Time (no. of one hour lessons)</th>
<th>1</th>
<th>1</th>
<th>1</th>
<th>3+</th>
<th>2</th>
<th>2</th>
<th>1</th>
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### Activities

<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Students:</th>
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<tbody>
<tr>
<td>explains assignment. The specific topic is negotiated between teachers and students.</td>
<td>explore different types of resources; check the resources against a checklist</td>
<td>make further selection of resources and explore them deeper;</td>
<td>create a digital resource (learning object); If it is a movie: storyboard;</td>
<td>present results to other groups in different phases;</td>
<td>integrate valuable feedback to further develop the learning object.</td>
<td>publish and distribute: put in app store, upload to educational portal,</td>
<td></td>
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**Dream**
- Teacher: explains assignment.
- The specific topic is negotiated between teachers and students.

**Explore**
- Students: explore different types of resources; check the resources against a checklist.

**Map**
- Students: make further selection of resources and explore them deeper.

**Make**
- Students: create a digital resource (learning object); If it is a movie: storyboard.

**Ask**
- Students: present results to other groups in different phases.

**Re-make**
- Students: integrate valuable feedback to further develop the learning object.

**Show**
- Students: publish and distribute: put in app store, upload to educational portal.
### Students and teacher agree what the end product should be and produce a plan to get there.
- Teacher makes clear expectations and ambitions (keep next phase of the curriculum in mind).
- There will be an audience they will be working for: app store, portal, etc.

### Students:
- define research questions, brainstorm and present ideas with post-its, interactive whiteboard;
- group display post-its and form groups based on interest.

### Learning Environment(s)
**The physical or virtual setting(s) in which learning takes place**

<table>
<thead>
<tr>
<th>Environment Type</th>
<th>Example Setting</th>
<th>Example Environment</th>
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<th>Example Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Classroom</td>
<td>Open Learning Centre and classroom</td>
<td>any environment with Wi-Fi</td>
<td>formal moment, in class</td>
<td>any environment</td>
</tr>
<tr>
<td>Virtual Classroom</td>
<td>can be outside school (home, library, café...)</td>
<td>can be outside school (home, library, café...)</td>
<td>depends on chosen tasks and outcome</td>
<td>class display to each other</td>
</tr>
<tr>
<td>Other</td>
<td>can be anywhere: stimulating brainstorming environment</td>
<td>can be anywhere: stimulating brainstorming environment</td>
<td>depends on chosen tasks and outcome</td>
<td>virtual platform for publication can be portal, VLE, Wikipedia, app store</td>
</tr>
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</table>

### Digital technologies and tools

<table>
<thead>
<tr>
<th>Tool Type</th>
<th>Example Tool</th>
<th>Example Tool</th>
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<th>Example Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built-in multimedia tools</td>
<td>search engine</td>
<td>Mindmapping</td>
<td>use blogs, ePortfolios, wikis if necessary to share interim results</td>
<td>same tools depending on chosen outcome</td>
</tr>
<tr>
<td>Mind mapping tools</td>
<td>Evernote</td>
<td>Create a sharing space, for example in the cloud (or a closed learning environment), for providing an opportunity for students to publish and showcase their illustrations, demonstrations, digital stories, etc.</td>
<td>use blogs, ePortfolios, wikis if necessary to share interim results</td>
<td>same tools depending on chosen outcome</td>
</tr>
<tr>
<td>Interactive whiteboard to support brainstorming</td>
<td>Wi-Fi is necessary from this phase on</td>
<td>any environment with Wi-Fi</td>
<td>depends on chosen tasks and outcome</td>
<td>depending on chosen outcome</td>
</tr>
</tbody>
</table>

### Follow up:
- What does your family think of it?
- What does your class/teacher think of it?
- What will the world think of it?

Follow up: content produced is used for teaching purposes (cf. prosumer approach where students are consumers of material they produce).

Creative Classrooms Lab project | [http://creative.eun.org](http://creative.eun.org)
This project has been funded with support from the European Commission.
### Roles (teacher, students, parents, experts, etc.)

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
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<tbody>
<tr>
<td>Teacher</td>
<td>The teacher is a coach and his role is mainly supportive, but the teacher should have a clear idea of the pedagogical goal before starting to work. Time always becomes a very restrictive factor in the implementation of such scenarios. Targets should not be too ambitious. Smaller and less time consuming learning resources, combined with phases of reflection and discussion, will make the performance more predictable and motivating than complex content production processes.</td>
</tr>
<tr>
<td>Students</td>
<td>Student-centred learning: decisions arise from their discussions. Students are expected to self-organise work groups (supported by teacher).</td>
</tr>
<tr>
<td>Experts</td>
<td>Involve librarian or resource centre if exist, as expert. Teacher creates list of websites. Students: Explorer Stress the project character of the scenario: Students work over an extended period in small groups where individuals are responsible for different parts of the learning and content production. So students should become responsible for teaching others in the peer group core knowledge and skills.</td>
</tr>
<tr>
<td>Students</td>
<td>Students create top 10 list of resources, having discussed and agreed selection criteria. Teacher: The teacher is coach and monitors the content creation process, suggesting other resources.</td>
</tr>
<tr>
<td>Teacher</td>
<td>The teacher gives feedback and oversees peer review in a safe environment. Students: Students present and give feedback on others. Also learn lessons from the process: importance of learning from each other – listening, taking criticism, making constructive suggestions, assertiveness.</td>
</tr>
<tr>
<td>Experts</td>
<td>Experts help if necessary. Technical support if students get stuck. Teacher: Teacher is coach.</td>
</tr>
<tr>
<td>Students</td>
<td>Students constructing learning objects. Experts: Experts help if necessary. Technical support if students get stuck. Teacher: Teacher is coach.</td>
</tr>
<tr>
<td>All stakeholders</td>
<td>All stakeholders give feedback. Students: Students are producers of content. Other students are consumers of content produced by their peers. Teacher: Teacher collates resources, investigates possibility of making resources available under OER licence or Creative Commons.</td>
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### Collaboration, team work

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<th>Collaboration</th>
<th>Team Work</th>
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| Individual work, personalisation | Starting individually  
- post-its  
- forming groups  
- Students decide on roles and workflows within groups, supported by the teacher. |
| Individual work, personalisation | Individual: looking up for resources  
- in groups: presenting resources in team and reflection  
- Pupils + teachers have worked together on the checklist. |
| Individual work, personalisation | In groups  
- peer review:  
  - Students make the digital content / tool and give it to another group and observe the group quietly.  
  - Are we looking back and forward – are we keeping track?  
- the availability of a prototype of a learning resource  
- it should aim at attitudes, skills and knowledge  
- self-assessment:  
  - Have I used the top list of resources?  
  - How was that?  
- immediate peer feedback during the content creation phase, sharing interim results  
- Feedback from 3rd parties is crucial but has to be safe.  
- consider the audience  
- learn from the feedback, taking lessons |
| Individual work, personalisation | In groups  
- a remade product  
- teacher assessment  
- feedback posted in VLE  
- peer review during final showcase moment  
- collect and store evidence of collective and individual achievement |

### Reflection (reflecting upon one’s learning and reporting activity status and progress)

<table>
<thead>
<tr>
<th>Reflection</th>
<th>Reporting activity status and progress</th>
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| Assessment (type, instruments) | Check resources with checklist  
- Students could create small ‘knowledge nuggets’ or interactive flashcards with the information, images and videos collected to demonstrate learning, shared with peers and |
| Assessment (type, instruments) | Peer review:  
  - Students make the digital content / tool and give it to another group and observe the group quietly.  
  - Are we looking back and forward – are we keeping track?  
- the availability of a prototype of a learning resource  
- it should aim at attitudes, skills and knowledge  
- self-assessment:  
  - Have I used the top list of resources?  
  - How was that?  
- immediate peer feedback during the content creation phase, sharing interim results  
- Feedback from 3rd parties is crucial but has to be safe.  
- consider the audience  
- learn from the feedback, taking lessons |
| Assessment (type, instruments) | A remade product  
- teacher assessment  
- feedback posted in VLE  
- peer review during final showcase moment  
- collect and store evidence of collective and individual achievement |

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### Additional comments from Advisory Board:

1. **Production and learning are two strongly related activities that have to be linked together.** Learning becomes part of material research, content production, and continuous reflection of that content. Therefore the process of content creation is no longer static: While in traditional learning settings when the content was developed by teachers or experts in the field relied on static content, one-to-one computing and particularly tablet teaching becomes more a living system with continually updated and/or changed educational resources. Therefore, it would be good if the scenario tried to develop a more iterative content development approach where content production and reflection become an integral part of the bigger knowledge loop (see Baumgartner 2004).

2. **Encouraging students to take the role of a producer is a challenge.** Teachers are advised to lower the complexity of a topic in order to encourage the students to do that. This requires a climate of open innovation at the schools as well as teachers and students willing to contribute their ideas in. Teachers will also need to develop different educational approaches for different complexity levels. Preliminary instruction on the topic (e.g. discussions, presentations etc) for example may be necessary for students with little or no pre-knowledge before the brainstorming is effective, especially in subjects where contexts are new or of high complexity. In addition to that, practice reports (or narratives) that emerge from other practitioners’ practice or expert support from peer teachers will be valuable.

3. **Teachers need to be provided with more specific examples.** A list of hyperlinks to the best short videos or a concrete description of learning story would be very useful. Lithuania does not have good innovative interactive textbooks, but there is much interactive digital content as digital learning objects for free [http://hokusiene.wordpress.com/category/ikt-ugdyme/plansetiniai-mokymus/](http://hokusiene.wordpress.com/category/ikt-ugdyme/plansetiniai-mokymus/).