

Project Acronym: CATALYST

Project Full Title: Collective Applied Intelligence and Analytics for Social Innovation

Grant Agreement: 6611188

Project Duration: 24 months (Oct. 2013 - Sept. 2015)

# **D4.4.2 Project Testbed: Online Creativity Support / video-based gamification**

Deliverable Status: Final

File Name: CATALYST\_ D4.4.2.pdf

Due Date: July 2015
Submission Date: September 2015

Dissemination Level: Public Task Leader: 14P





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# **Revision Control**

Version	Author	Date		Status
0.1	Rosa Strube, CSCP	September 2015	11,	Initial Draft
0.2	Marc-Antoine Parent, I4P	September 2015	18,	Draft
0.3	Frank Escoubès, I4P	September 2015	22,	Quality Check
0.4	Marc-Antoine Parent, I4P	September 2015	25,	Final draft
1.0	Marta Arniani, Sigma Orionis	September 2015	28,	Final Draft reviewed and submission to the EC



# 1. Executive summary

The present document is a deliverable of the CATALYST project, funded by the European Commission's Directorate-General for Communications Networks, Content & Technology (DG CONNECT), under its 7th EU Framework Programme for Research and Technological Development (FP7).

It is focused on the project Testbed 'Online Creativity Support / video-based gamification' and details the returns on experience (REX) from test 2: the test of the creativity tools took place as part of the test of Assembl with the **7**<sup>th</sup> **Sustainable Summer School** run by CSCP. The document reports in details the test context, process and feedback, and the formal recommendations for future research avenues to help generalize the use of this video-based creativity technique.



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#### 1. Introduction

The creativity tools' design is described in detail in D3.7.1 (Weak co-occurrence creativity tool), describing the video creativity widget, and D3.7.2 (Gamification Creativity Tool), describing the card creativity widget. Each tool is designed to be useful in two distinct scenarios: a participant to a discussion can ask for inspiration to come up with new messages around an idea, or the moderator can call for a period of concerted ideation, where participants can propose new ideas, which can be further discussed.

The creativity session is meant to be a separate conversation, allowing for divergent thinking without polluting the main conversation, and a handpicked subset of ideas and comments was to be imported back in the discussion at the end of the session.

The second scenario uses the gamification card creativity tool, whereas the first scenario (inspiration) could be configured with either video or cards creativity. The card interface was designed to encourage participants to find an idea to a question that they did not choose themselves, and to comment on one another's idea socially. The moderator could pick ideas to import back into the discussion, according to those best received in the comments. The original design also included "funny money" (aka bag of stars) so participants could rank ideas, but we left that aspect out in the test, both for time reasons and because of a concern that the vote could be perceived as binding for the moderators.

# 2. Pre-test adjustments

Before the test started, an interesting point of design was seen as problematic by the testing community: I4P had designed the creativity session widget as a unique opportunity for participants to directly propose ideas meant for the table of ideas, as opposed to messages, counting on the later selection process for quality control. However, the testing community had misgivings about the granularity of ideas proposed in the card widget, feeling that they might not be abstract enough compared to the harvested ideas. I4P expected this to be mitigated through reformulation of the proposed ideas, but the testing community felt that this could be perceived by participants as a distortion of the original idea, as opposed to harvesting which reformulates alongside an original quote. On the other hand, either accepting or rejecting those ideas without reformulation could also be perceived as too obviously arbitrary.

We tried to alleviate this issue by allowing the moderator to export the idea suggestions as either ideas, messages, or both. It was decided that the selection would mostly be at the message level, to hide the arbitrariness of the idea selection.

#### 3. Test context

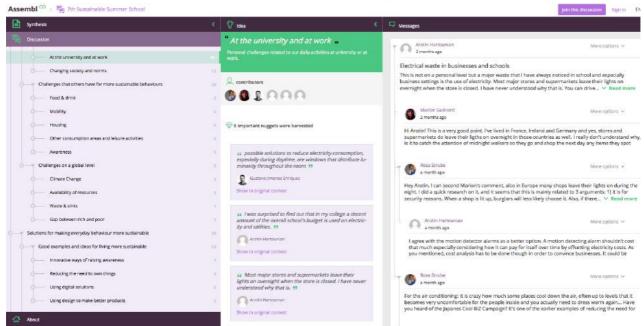
The test of the creativity tools took place as part of the test of Assembl with the **7**<sup>th</sup> **Sustainable Summer School** run by CSCP. The setting and outcomes of the overall test are described in detail in D.4.3.

The test was conducted with students of a one-week summer school on "Exploring ways for sustainable transformation in a limited world". The summer school offers courses mostly for design students interested in sustainability from all over the world and takes place in a different country each year.

### 4. Test process

While the preparation for the second testing phase started in March 2015, the test with the 7<sup>th</sup> Sustainable Summer School started on June 16th and finished on September 2nd, 2105. In total, 110 messages were posted in the discussion (Picture 1 shows a screenshot of the discussion).





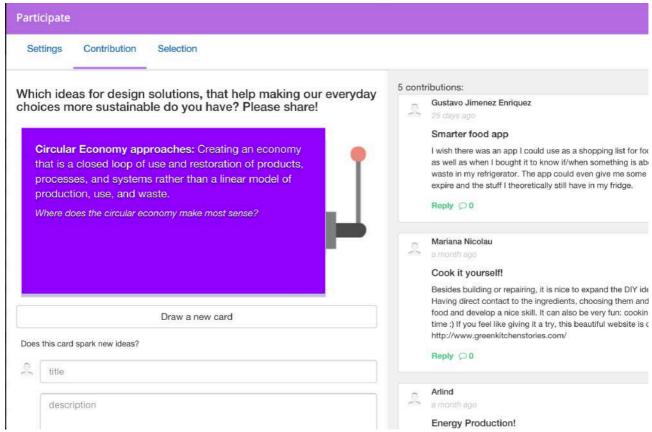
Picture 1: Screenshot of the online discussion

On June 16<sup>th</sup> all students who had, up to this point, signed up for the summer school, received an invitation by e-mail to join the online debate, which explained the setting of the testing, provided the questions for the first week of discussion and provided a short description about the Catalyst project. A new question for debate and a synthesis of the discussion were posted and sent to all students of the summer school on a weekly basis.

The harvesters both contributed and moderated the discussion. They had similar starting points for joining the debate compared to the other participants, as they were partly also students, had no prior experience with Assembl and had a personal interest in the topic discussed.

One webinar was hosted to encourage additional participation by proposing a competition for best ideas and to introduce the creativity widget on August 24<sup>th</sup>.





Picture 2: Card creativity session widget

On September 2nd, the team of harvesters joined the students during their summer school in Jüchen, Germany, to present the most interesting results of the online discussion by displaying the harvested quotes from Assembl and organising them into the structure developed for the Table of ideas. Also, some of the creativity cards were added. During the session, all students read through the quotes of the contributions. They were also able to add more content by writing it on additional cards provided and later voted for the most relevant ideas. After the interactive session, feedback on the testing was collected from them via surveys and discussions.

The online discussion followed 3 phases of overarching topics, related to the content of the summer school:

Phase 1: Getting to know each other and getting familiar with the topic (week 1-3)

- When you think about your last week, when did you take decisions that you know were unsustainable and why did you do so?
- Which additional challenges for living a more sustainable lifestyle do you see for yourself or people around you, for example when it comes to eating and drinking, shopping, getting from A to B or being at home?
- Which challenges on the global level are described in the publications by the Club of Rome?

Phase 2: Discussing solutions (week 4-5)

- Which good examples have you seen or heard of recently that make it easy for people to live a more sustainable lifestyle and to integrate sustainable behaviour into our daily routines? What do you like about them?
- Looking at the many examples that came together here, which ones do you think have the highest potential to change the way we act everyday? To which areas can they be applied and how can they reach more people?

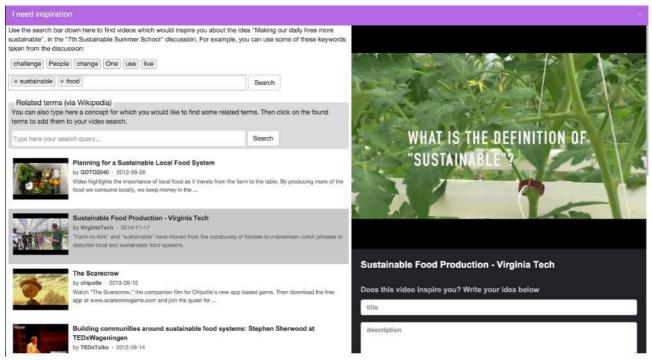
Phase 3: Sustainable design solutions (week 6-7)

- Which sustainable design solutions can you think of to address the challenges collected before? Which ideas do you have and what would you like to develop in the future?

The "inspire me" function was used starting from the second discussion phase from week 4 onwards where the participants were asked to discuss different solutions to sustainable lifestyle challenges. The creativity session feature was used for phase 3 in the last week of discussion. In this phase, the students were supposed to provide their own



project ideas related to the challenges identified earlier. The creativity session was provided as a support for this process.



Picture 3: Video inspiration widget

Even though introduced both in the weekly emails/the Synthesis and in the additional webinar, use of the creativity tools by the participants of the online discussion was relatively low. Only four posts were directly produced using the inspire me tool, by three users who were either harvesters or the community moderator. According to the survey results, however, participants must have at least tried the video widget, and reported appreciating it.

By the time phase 3 started, participation in the discussion had already fallen, possibly because students were getting close to the beginning of term. In order to increase participation again and draw the students' attention to the creativity session, a webinar was organised, where the tool was introduced as part of a competition for the best sustainable design ideas. Though during and after the webinar, some students expressed interest in the competition, this did not translate into contribution within the tool. The participation in the creativity session was very low: only five ideas were suggested, mostly by the community moderator and harvesters, and none of the ideas received any comment. The lack of "liking" on the ideas ended up having more consequence than expected. However, all the ideas were subsequently imported into the discussion; automatically as a post, as planned, and also manually as an idea. (The option of selecting them as reformulated ideas was probably not clear enough.) Some of cards and ideas were also proposed in a in-presence session, and new ideas came out of that session. (Those were not imported back in Assembl.) It seems that the creativity cards themselves were perceived as useful, as shown in the survey results below. Four of the participants declared having tested the creativity session tool, and most said they found it useful, though only one left a comment.

As for the post content, however, the posts coming from the creativity sessions seemed less integrated into the overall discussion. While the other posts were relating to what has happened on the platform otherwise, and brought in different ideas and thoughts, the posts generated by the creativity tools were more artificial and didn't relate so well to the discussion. Of course, the goal of creativity is to encourage divergent thinking, and integration is bound to be less tight; the real issue is whether those ideas were integrated in the follow-up conversation. But, at least in the case the video feature, there was a tendency to comment on the video without explaining it, which made for a post that was harder to read; while for other posts there was an argument first, and contributors added sources (videos or articles) to support it, often explaining why the video was introduced. There was thus more of a response in those cases. It might be helpful to encourage users to explain why the video is relevant separately from the idea that they propose.



### 5. Survey results

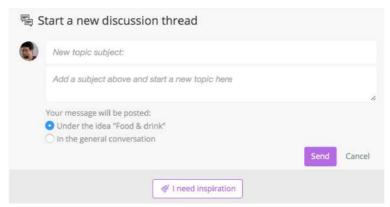
Feedback on the "inspire me" function and the creativity session were collected separately from both the **participants** and the **harvesters**, in their dual role as participants.

#### Feedback from the participants

On the user side, 6 people filled in the part of the survey covering the "inspire me" function, 4 did so for the creativity session. Of the respondents who tested the "inspire me" video creativity feature, 50% agreed or strongly agreed that the feature was easy to understand and use, while only 17% disagreed. Half the respondents agreed that the feature was useful to develop new ideas, while the other half was neutral.

Of the respondents who tested the creativity card session feature, 75% agreed or strongly agreed that the feature was easy to understand and use, while 25% disagreed. 75% of the respondents agreed or strongly agreed that the feature was useful to develop new ideas, while 25% was neutral.

The open comments in the survey showed, that one participant was not yet satisfied with how visible the tools were on the platform. He/she stated that they didn't really call attention and also suggested that the creativity cards should be directly integrated into the discussion platform instead of being only used in the session outside of the main discussion. A second respondent echoed this argument.



Picture 4: Inspiration widget button

It was highlighted that both tools were very useful. The "inspire me" video tool was described as delivering mostly useful results, which were inspiring. It was also mentioned though that the process could be time consuming and that, if one doesn't know what to contribute to a discussion would most probably just not do it instead of using a tool to create new content. This situation was seen different for the creativity session, as the creativity cards were seen as a very helpful approach to look at a topic from a different angle.

#### Feedback from the harvesters

The harvesters also completed a **feedback survey**, which covered the creativity tools and also provided more **detailed feedback** over the course of the testing.

The **survey** showed the following overall **levels of satisfaction** with the tools:

- □ 75% of the harvesters agreed or strongly agreed that from a harvester's perspective, the "inspire me" creativity tool was useful to give the participants the chance to get additional inspiration. Only 25% disagreed.
- All harvesters agreed or strongly agreed that from a harvester's perspective, the "creativity session" tool was useful to give the participants the chance to get additional inspiration.

Additional feedback gathered from the harvesters on the "inspire me" function was mainly around the topics of visibility of the tool and type of results generated by it.

The main point raised by the harvesters was the visibility of the tool: They didn't find it easy to spot the feature on the Assembl page. Also, they thought that the video link is embedded into the discussion post in a way that it is not easy to find for other participants of the discussion. It was stated that it is not easy to understand that the video the post is talking about is actually hidden behind the "inspiration source".

In terms of appropriateness of the tool to come up with suited suggestions for videos, the feedback was that it overall worked surprisingly well. There were some examples however where the suggested key words didn't generate any useful results. Also, as the tool is limited to Youtube, videos that are only available on other platforms like Vimeo cannot be found.



Additional feedback gathered from the harvesters on the "creativity session" function was mainly around the topics of visibility and usefulness of the tool.

The most feedback on the "creativity session" was also about its visibility and how it was integrated into the Assembl page. One harvester highlighted that the place where the link to the session is positioned in the platform and how it is described ("A creativity session is ongoing. Participate") is not really visible/attractive and does not clearly explain what the creativity session is or how it is linked to the discussion. He/she added that it would be nice to have an icon there, or a question and an icon, which could give some more context (like: "Running out of ideas for the discussion? We can inspire you! / Click here and get inspired!"). As the creativity session is a separate session, which is not directly taking place on the Assembl site, another feedback from the harvesters was, that this made it harder to see what people contributed, because one had to first enter the session him/herself. Also, unlike than for other comments, no notifications are send when someone posts in the creativity session.

All harvesters highlighted that the content of the creativity cards was very interesting and well suited to spark discussions.

Also, some smaller bugs related to names and pictures showing up in the creativity session were identified and improvement suggestions for the harvesting process of the comments added in the session were made.

#### 1.1 Analysis

The low participation numbers for both creativity tools stand in contrast to overall positive evaluation of both tools. Potential explanations for this discrepancy could be the following:

- 1) The survey results could be inaccurate. If people have a generic good impression of the process, they may give positive answers to questions about which they have nothing to say.
- 2) It is possible that some participants did use the tools, were inspired by them, but chose to only give their new ideas in the in-presence session. (Reluctance to use online tools in general was mentioned by many participants.)

Otherwise, here are factors that could explain the low response rate (but not the discrepancy):

- 3) Visibility of the tools: Most importantly, participants and harvesters mentioned that both tools were not that visible. Especially for people not visiting the platform often, it might have been easy to miss the session. The fact that the creativity session opens in a new window and took a while to load might have been an additional challenging factor.
- 4) Timing: The "inspire me" function was used starting from the second discussion phase from week 4 onwards while the creativity session feature was used for phase 3 in the last week of discussion. While both tools were introduced in the weekly mails and the creativity session was also presented live in a webinar, participation on the platform was already declining towards the end of the discussion, so that less participants came to the platform especially during the test of the creativity session. Also, for this session, the time period of testing of one week was rather short, but it was the only way to integrate it well into the overall discussion logic.
- 5) In the case of the card-based creativity session, it is also possible that the lack of comments is due to the lack of feedback (visual or otherwise) on in-session activity.
- 6) The absence of voting on ideas in the session may have affected motivation (though voting was announced for the live meeting)
- 7) Perceived need for the tools: While the way the tools worked was rated as very useful in the surveys and also the creativity cards were seen as very inspirational by the students during the live meeting, it could be that the tools only fit certain online debates. Some of the harvesters stated that from their point of view people would mostly be willing to post on Assembl when they could express their own point of view or knowledge, whereas participants would be less eager to spend additional time before participating to the debate by using the tools. It can also be argued that the video Inspire me widget is a tool that may be used by super-users only, and even maybe by harvesters and community managers only: it is indeed a very powerful animation tool and could be used as a way for the animators to sustain engagement of the participants through visual stimuli.



#### 6. Conclusions and future work

Overall, the results of using the creativity widgets are positive: Despite low numbers, new ideas were proposed using both widgets, and participants (including harvesters) reported enjoying the experience of using outside sources of inspiration. Many of the more negative comments about the widgets concern the overall lack of integration in the platform, which is a consequence of their design as external widgets.

Indeed, we have attempted to design decoupled tools which could be reused in an ecosystem; but users of modern platforms expect extremely tight visual integration, and most generic widget platforms (such as OpenSocial) have had comparatively poor (and declining) adoption. Though we believe the technical ecosystem approach did yield positive results in the case of analytics, the results are more ambivalent in the case of visual/procedural elements. Neither is the technical decoupling as successful as hoped, and adopting the widgets on another platform, though possible, would require significant work. Despite this, the fact that we could invite users in a "separate space" for divergent thinking and obtain new ideas is a partial success, and we believe it is possible to improve visual integration with a richer API without invalidating the approach.

As for the methodology, some participants pointed out the difficulty of integrating creativity in an overall process. It is well known that creativity (divergent thinking) must be followed by a convergent thinking phase; but the creativity session came at the end of the whole conversation process for those students, and ended before their class, which would have been a more natural setting for the convergent/critical phase of ideation. This absence of convergence phase probably explains the lack of comments on new ideas. More globally, this divergence phase was not well integrated in their larger course sequence, and this was bound to affect motivation. This does not invalidate the methodology or tools developed, but emphasizes how much those tools must be deployed in the context of an appropriate process, following methodology and goals shared by participants.

One possible avenue for further development is the design of a **clear timeline** for different conversation phases, such as the convergent and divergent phases defined by the creativity session, visually integrated into the main platform. Comments seemed to be favorable to the timeboxing afforded by the session, and improving the visibility of future phases as well as the current phase might increase motivation. (On the other hand, more organic communities will not generally support such a well-defined discussion schedule, and are better served with the existing inspiration widget.) Also, the gamification aspects can be greatly expanded, with the future addition of votes and leaderboards.