

# NEWSLETTER

SEPTEMBER, 2017

## PROJECT REVIEW / LOCATION-BASED BEACONING GAME CODING & ROBOTICS

SEPTEMBER 15, Luxembourg

On 15 September 2017 the first European Commission Periodic Review was held in Luxembourg. The partners presented the results achieved for the first half of the project, including the innovative products developed within the project (e.g. the games/learning design authoring tool) that are linked to the platform, a beta version of the teacher/students user interface, dissemination and piloting results. Within work package 4, the partners gave an interactive presentation which presented the main objective of the project with help from game Coding and Robotics developed by Geomotion. During the presentation, the participants were asked to help a virtual character called Alfred build a robot that would help the Earth Special Agents in their duty. The participants had to explore the real world, find hidden locations and answer to questions (eg. about the environment around the building where the meeting had been taking place) in order to collect 4 pieces to complete the robot.

## ASTEL Workshop at EC-TEL Conference

SEPTEMBER 12, Tallinn, Estonia

On 12 September, the EC-TEL conference in Tallinn was held where an interactive workshop on gamified lesson plan creation took place, putting together technologies and tools developed within the scope of the BEACONING project.

During the morning sessions, attendees were provided with an overview of the project, the achievements so far, and a presentation of the developed digital tools. Leveraging on this information, participants were asked in the afternoon session, to co-design gamified lesson plans and then pitch their results to the audience. After 2 hours of group work, two lesson plans had been created, one about digital literacy with a specific focus on security, and the second one about environmental issues with a focus on the effect of global warming.

Both lesson plans were very interesting and represented a different approach to using the BEACONING platform: the first one was more concrete and pragmatic making it very easy to be effectively prepared by teachers and played by the students. The second plan represented a more "extreme" approach for the use of the BEACONING platform. In fact, global warming awareness is raised for participants through a journey split over several missions from the past to present, ending with a simulation of the consequences we would have to cope with if nothing changes.

The creativity of the second lesson path is expressed by the possibility for the students to experiment directly with future environmental issues related to global warming, since in some activities "minigames" the use of some Rage technologies was envisioned to measure and assess emotional feelings of the players; e.g. skin temperature measurement while playing a minigame in a very warm room. The group work session ended with a pitching session where both teams were asked to present their stories in 5 minutes. At the end of the presentations, an award ceremony was held where both teams were awarded a prize; one for the "most pragmatic" lesson plan and another for the "most creative". After the awards ceremony, an open discussion took place which was moderated by the workshops organizers. The goal of this was to analyze the lesson plans in more details, highlighting the pros and cons of both.

It was a very productive meeting, where attendees demonstrated a great deal of interest in the technologies made available by both projects, and worked hard until the end of the day in order to exploit their creativity whilst having fun.

DETAILS



beaconing.eu



twitter.com/BeaconingEU



facebook.com/beaconing

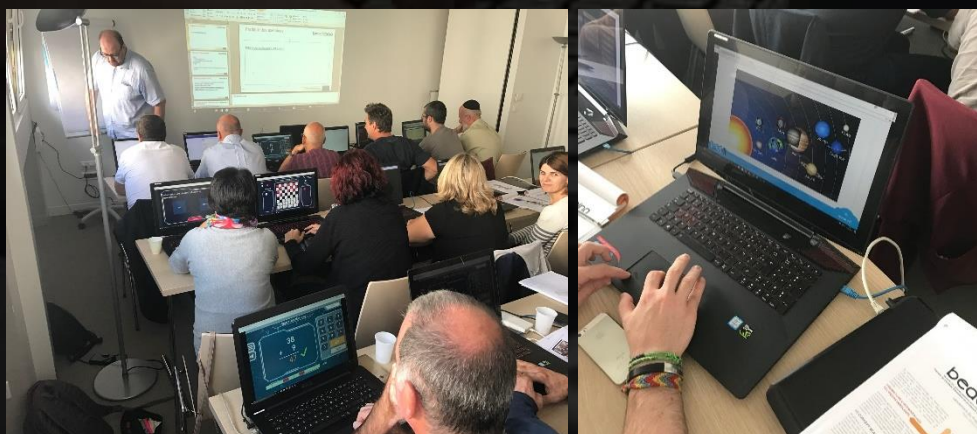
## BEACONING Workshop with teachers in Paris

AUGUST 30 - 31, Paris, France

Before starting their new school year, in ORT Paris, Teachers from ORT Toulouse, ORT Montreuil, ORT Lyon, and ORT Villiers Le Bel met to be trained on BEACONING tools. Organized as a Summer Camp, participating teachers came from different ORT organisations in France, and were grouped according to the STEM topics taught. Most of them had already attended previous workshops which presented BEACONING, and were now very interested in being trained for GLPs creation.

The Minigame possibilities (non geolocalised and geolocalised) were presented to the teachers, who were able to practice them for themselves, creating awareness between them. In groups, the teachers began to define their own Gamified Learning Paths proposing, for most of them, integration of beacons/geolocalised activities for completing traditional activities.

The next steps within this process will be to help teachers enter their GLPs and propose that their first release should be trialed by them and then refined before practising lessons with their students.

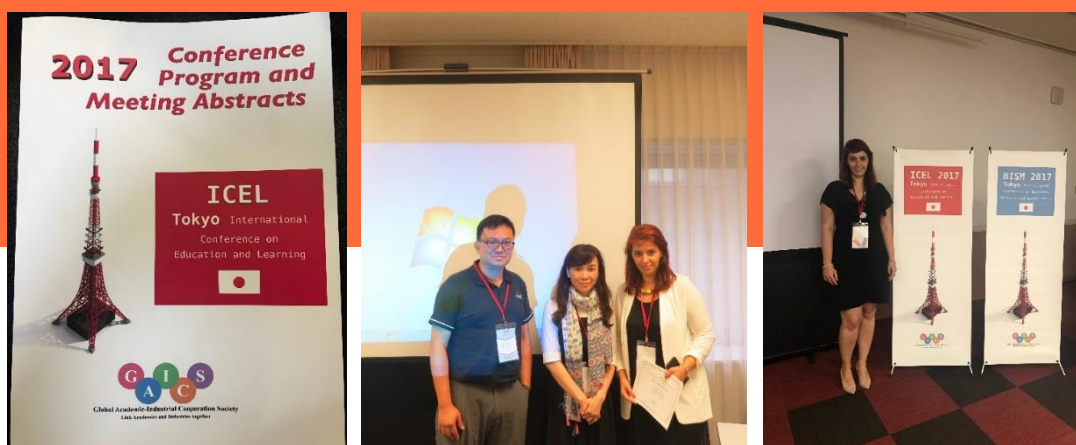


## BEACONING presented at ICEL 2017

AUGUST 16 - 18, Tokyo, Japan

On August 16-18, 2017, the International Conference on Education and Learning (ICEL 2017) was held in Tokyo. The main objective of ICEL was to provide a platform for researchers, academics, practitioners and industrial professionals from all over the world to present their research results and development activities in the fields of Education and Learning. The conference provided opportunities for the delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration.

The Romanian team presented a successful paper named Digital Educational Games for Foreign Language Learning, describing a Serious Game Development Environment that supports the creation of customizable educational games. The work presented herein was partially funded under the project BEACONING, funded by the Horizon 2020 Framework Program of the European Union and under the project DESiG, funded by UEFISCDI, Romania.





## Turkish Head Teachers Piloting BEACONING Authoring

JULY 13, Ankara, Turkey



SEBIT organizes regular training sessions for the head teachers of the Ministry of National Education. Head teachers are master instructional designers who can help BEACONING with Gamified Learning Path localization. Earlier this year one session was devoted to BEACONING and a general introduction was delivered. This time, a hands on activity was organized to let head teachers pilot BEACONING's Authoring Tool for play-lesson plans. They experimented with methods for blending gaming and learning. They evaluated interfaces for entering rubrics and metadata. The general impression was that the accessibility of the tool is very high. Detailed feedback was also gathered and presented to the project team.

## DELIVERABLES



### Work Package 5

D5.1 Single Component user test



### Work Package 6

D6.1 Evaluation guidelines



### Work Package 6

D6.2 Pilot setup report



### Work Package 7

D7.2 Preliminary exploitation strategy

## Engaging ORT schools for large piloting

Milan, Italy

ORT France presented BEACONING concepts to ORT Italy Milan during a telco during which representatives of ORT exchanged and discussed the features of BEACONING and highlighted the most relevant ones for STEM based activities using a gamified approach.

In Italy, our network ORT school "Scuola ebraica di Milano" in Milan will pilot activities involving around 10 teachers and approximatively 100 students; depending on the selected learning paths. The learning paths targeted in the school are related to basic algebraic skills and digital identities. The first piloting activities will be carried out after the training programme which will be undertaken by the teachers using the BEACONING tools. Some selected expert teachers (one or two of the teachers) will follow the training program for learning designers aimed at defining new sets of learning game paths or refining existing ones whilst remaining teachers will utilise the existing set of scenarios.

The next steps will be to undertake a live demo of the early prototypes in September 2017

## ORT Bulgaria schools for large scale piloting

Sofia, Bulgaria

In Bulgaria, at the Lauder-ORT "Dimcho Debelianov" School, in Sofia, a set of teachers in STEM topics, particularly Coding and Maths will be involved in the Piloting activities. The BEACONING concepts were presented to ORT Bulgaria pedagogical representatives in order to address STEM based gamified approaches. The Maths example learning paths were showcased and the possibility of defining new learning paths for both chemistry and physics were discussed.

The high school curriculum, amongst the different tracks, will focus on the information technology and digital design & media tracks in which Beaconing will be piloted. The ORT School in Bulgaria is currently awaiting the next training session in which the different tools will be presented. This will take place in autumn 2017 and involve 10 teachers from the different targeted STEM topics (Chemistry; Physics and Biology and Maths). Approximately 100 students will be involved in the first round of piloting in March 2018, focusing on the piloting of the BEACONING learning paths. Training of some teachers as Learning Designers for the second round of piloting will then take place in autumn 2018.

## ORT South Africa Large scale Piloting

Soweto, South Africa

ORT South Africa pedagogical school representative and ORT Paris met on-line to present the BEACONING concepts and its innovative feature set, from the pervasive approach to the geolocalised problem-based quests for STEM. ORT SA, is involved in different IT projects and is leading their country in advancing STEM and IT, in which they have already involved some of their schools for young students.

ORT South Africa has a reputation for expertise in STEM education within South Africa, particularly STEM programs in an identified Specialized STEM school in Soweto. The Gauteng Department of Education Schools of specialization are distinct from normal public schools because they have a strong technical and vocational content. Learners are given workplace exposure and career guidance in their chosen fields in order to prepare them for the transition to work or the pursuit of higher training in the STEM fields.

The Curtis Nkondo School of STEM Specialization was established in 2016 with the aim of changing the face of education in township schools. Each learner receives a tablet device to enhance their learning experience whilst each teacher is issued with a laptop to aid their educational process. Learners have access to computer labs as well as free access to the Internet.

The project will be piloted with 15 teachers from Curtis Nkondo School of Specialization using the paths for learning with approximately 400 students. ORT SA is also running Coding clubs with teachers and students as a STEM subject. The ORT SA coding curriculum empowers participants in mathematical, science, design, technical and computer skills. All three existing learning paths of the BEACONING solution; coding, digital identity and algebra will be introduced to relevant teachers.

## ORT Israel Schools for large scale piloting

Tel Aviv, Israel

During different on-line meetings, ORT France and pedagogical representatives of ORT Israel schools were discussing the opportunity for the schools to be engaged in an innovative learning process in which they presented the game based approach for solving problems in STEM.

After presenting the different sample learning paths and the features of the BEACONING platform to both teachers and students, some of the Israeli schools will be engaged to Pilot the activities. Among the large amount of schools in Israel, the most relevant ones for BEACONING will be selected. Among them the Beer Sheva College of Technology and the Tel Hai College that is developing a virtual learning environment to enable several schools working together using learning through problem solving. Also, as most of the schools in Israel are engaged in the Robotraffic Competition, an international competition for schools, hosted by the Technion Institute – Israel Institute of Technology, within which it develops the teamwork and creative problem-solving skills, the BEACONING Gamified Learning Paths will be used and/or enriched.

For preparing the foundations of BEACONING in different schools in Israel, the schools teachers and stakeholders will meet during a series of workshops for the preparation and training for:

- Informing them and allowing them to reflect upon their own gamified learning paths;
- Presenting and using the first set of tools on their own and in groups;
- Engaging their own students into BEACONING classrooms.

## Showcasing Beaoning tools

Bucharest, Romania

In Bulgaria, at the Lauder-ORT “Dimcho Debelianov” School, in Sofia, a set of teachers in STEM topics, particularly on Coding and Maths will be involved in the Piloting activities. The Beaoning concepts were presented to ORT Bulgaria pedagogical representative there to address STEM based gamified approach. The Maths example gamified learning paths was showcased and the possibility to define new learning paths for both chemistry and physics was discussed.

The high school curriculum, among the different tracks, will focus on the information technology and digital design & media tracks in which Beaoning will be piloted. The ORT School in Bulgaria is awaiting for the next training session in which the different tools will be presented in Fall 2017 involving 10 teachers from the different targeted STEM topics (Chemistry; Physics and Biology and Maths) and around 100 students will be involved in the first round of piloting in March 2018 focusing firstly on the piloting of the Beaoning learning paths and then on the training of some of the teachers as Learning Designers for the second round of Piloting in autumn 2018.

