



BOTSTEM
roBOTics and STEM education for children and primary schools
Erasmus+ KA2 Project n°: **2017-1-ES01-KA201-038204**

EXPLOITATION PLAN REPORT
December 2018

Polo Europeo della Conoscenza



The BoTstem partners during the first phase of the project has already planned how to transfer the successful results of the programmes and initiatives to appropriate decision-makers in regulated local, regional, national or European systems, and how to convince individual end-users to adopt and/or apply the results of programmes and initiatives, on the other hand. The aim of this exploitation plan is to maximise the potential of the funded activities, so that the results are used beyond the lifetime of the project. The partnership is very much aware of the fact that the project is being carried out as part of an international programme working towards lifelong learning and supporting European policies in the field of education. Project's results therefore will be developed in such a way that they can be tailored to the needs of others; transferred to new areas; sustained after the funding period has finished; or used to influence future policy and practice at European level. This plan is including measurable and realistic objectives, and foreseen a resource planning for the activities to be undertaken. The exploitation plan aims to:

Raise project awareness in a wider public of possible users;

- extend the impact;
- engage new stakeholders and target groups;
- share methodologies and know how;
- influence policy and practice;
- develop new partnerships.

What will the partner exploit?

Mainly the project's results of both concrete (tangible) results as well as of skills and personal experiences that both project organisers and participants to the activities have acquired (intangible results).

Tangible results will include:

- an innovative approach to stem education and to improve the teaching/ training quality;
- a toolkit, curricula and e-learning tools;
- researches, reports and studies;
- good practice guides;
- evaluation reports;
- recognition certificates;
- newsletters and information leaflets.



Intangible results include:

- knowledge and experience gained by participants, learners and staff;
- increased skills and achievements among partners organizations;
- improved educational awareness and problems to be solved;

The intangible results will be measured by the public participation to the foreseen exploitation actions and the interest to be involved in future activities

Exploitation plan target audience and groups

The exploitation plan target groups are foreseen at different geographical levels (local, regional, national, European) and in the own field of the beneficiary (colleagues, peers, local authorities, other organisations leading the same type of activity, networks, etc.) . Activities and messages will be tailored appropriately taking into account audiences and target groups:

- end-users of the project activities and deliverables;
- stakeholders, experts or practitioners in the field and other interested parties;
- decision-makers at local, regional, national and European level;
- press and media;
- general public.

The exploitation plan will be flexible enough to allow target groups and other stakeholders to become involved during the last part and after the project's life time. This will ensure that the project remains on track in terms of their needs. Their participation will also highlight the potential value of your project as well as help to spread the news to other interested parties throughout Europe.

How we will exploit the project's results

In order to reach as many people as possible the partners will translate as many communication materials and project outputs in as many languages as possible English language included.

The exploitation will be mediated through the following tools:

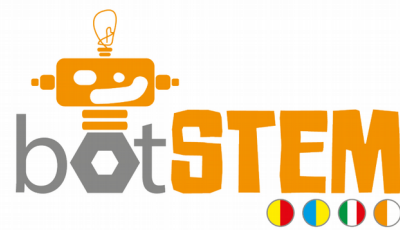
- the Erasmus+ Project Results Platform (see below);
- project or organisational websites;
- meetings and visits to key stakeholders;
- dedicated discussion opportunities such as information sessions, workshops, (online) seminars, training courses, exhibitions, demonstrations, or peer reviews;
- targeted written material such as reports, articles in specialised press, newsletters, press releases, leaflets or brochures;
- audiovisual media and products such as radio, TV, YouTube, Flickr, video clips, podcasts or apps;
- social media;
- public events;
- project branding and logos;
- existing contacts and networks.

In terms of exploitation it is important to think about how results can make a difference to the project, end- users, peers or to policy makers. Exploitation mechanisms include:

- positive reputational effects for the participating organisations;
- increased awareness on a theme, target or area of work;
- increased influencing on policy and practice.

When exploitation activities be carried out.

All the partners had set up a timetable of activities and allocated appropriate human and budget and resources to fulfil the plan. The exploitation activities will start in the last part of the project when the projects results will be available in a concrete and approved quality by all the partners and continue at different stages after the project ending. The website and the platform will be maintained for more than 5 years after the project's term.



How to assess the exploitation success?

The impact assessment is an essential part of the exploitation process. The following indicators will be used to measure the exploitation activity success: Questionnaires, interviews, observations and assessments will measure the exploitation project's impact. The indicators has been identified at the start of the project and part of the overall dissemination plan.

The exploitation plan report is based on the activities, plans, in the last period of the project and after the project's life time for at least 5 years (website). Every partner has collaborate to define the quantitative and qualitative data, foreseen for the project exploitation plan. The quality of the partnership is the best contribution for the project's exploitation plan because they can normally guarantee, in their daily activity, a massive exploitation for the project future impact at local, regional, national and European level.

EXPLOITATION PLAN 2020-2022

Name of the partner: University of Burgos (UBU)

Activity planned	Theoretical Framework and Activities
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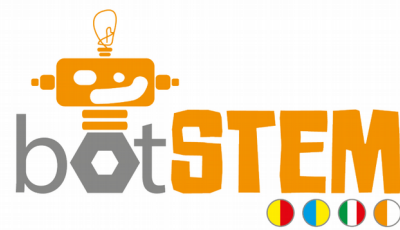
<p><i>Pre-service teachers (kindergarden & primary school) University training</i></p>	<p><i>UBU will include the theoretical framework and the activities developed, in subjects of the Degrees in pre-primary and primary education at UBU, such as in 'Natural Sciences II' and 'Innovation and Research in Science'.</i></p> <p>Impact assessment: The inclusion of the framework in the subjects guidelines</p>
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Activity planned	Theoretical Framework and Activities
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<p><i>Pre and in-service teachers in University Master training</i></p>	<p><i>UBU will include the theoretical framework and activities developed, in the Master of Innovation and Research in Education at UBU.</i></p> <p>Impact assessment: The inclusion of the framework in the subjects guidelines</p>
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Activity planned	Activities
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<p><i>Regional initiatives</i></p>	<p><i>UBU will include the activities in extracurricular programmes, sponsored by Fecyt and developed by the Unit of Scientific Culture of UBU, such as in 'Saturdays of Science' and 'Castilla y León Science Fair'. These initiatives are designed to bring Science closer to children.</i></p> <p>Impact assessment: The inclusion of Botstem activities in these extracurricular programmes.</p>
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Activity planned Theoretical Framework and Activities

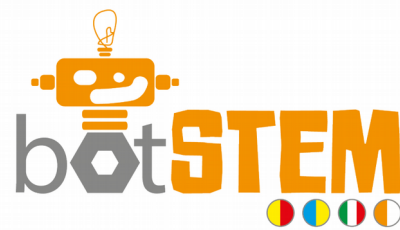
Supervision of academic projects *UBU will supervise Final Degree Projects and Master Thesis using the framework and the activities developed in the project.*
Impact assessment: the number of Final Degree Projects and Master Thesis produced using the framework and the activities

Activity planned Theoretical Framework and Activities

Dissemination activities *UBU will present the results in specialized conferences, as well as write some scientific articles.*
Impact assessment: the number of conferences and articles derived from Botstem project

NAME OF THE PARTNER -VPOLO EUROPEO DELLA CONOSCENZA

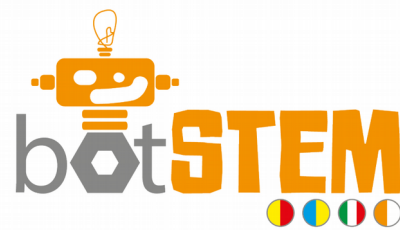
Activity planned	Strategy and methodology
Define the activity	Describe the event foreseen and to whom It could be addressed
<i>Training courses</i>	<p><i>POLO organizes about 40 training courses a year addressed to teachers and parents - 2700 persons trained a year integrating STEM teaching using the Toolkit as theoretical and practical basis to develop the lessons and pro social values.</i></p> <p><i>The toolkit will be distributed among the participating teachers and new integrated activities will be developed within the theoretical framework proposed.</i></p> <p><i>The lessons will be practical and will involve directly the teachers, they will last 2 hours and will take place in the afternoon in Verona.</i></p>
New Erasmus+ projects	Polo Is already thinking to involve the project partners and enlarging the group for a future eu project using the project’s toolkit as main, but not only tool to create an European network
world NGO	POLO is working to create in 2019 a world organization for education and innovative research unifying countries like USA, India, Turkey and with representative in all EU countries. The first step of this organization will be in India on February 2019. Botstem and the toolkit will be one of the tools proposed at world level as educational innovative strategy
<i>Conferences</i>	To use Botstem projects results for al least 2 international conferences in



Verona

Name of the partner - SENIOR EUROPA S.L. (Kveloce I+D+i)

Activity planned	Strategy and methodology
Consultancy	<p>KVC is a consultancy. To participate in projects, wide spreading our portfolio and our success cases raise our reputation in the Spanish market and also gives us significant new opportunities for being involved and granted in commercial tender or bidding processes.</p>
New business	<p>There are only a few companies in Spain working on social impact assessment and action assessment within international projects; this niche is mainly covered by Universities – so, being the clear majority public entities. Some projects may require a more agile way to access to the impact assessment: universities and, in general terms, public administration cooperation represents, for companies, major barriers due to the lack of availability of the staff, the times managed or the bureaucracy involved, among other issues.</p>
line: action and impact assessment	<p>To be able to participate in the project as full partner opens a vast horizon of cooperation and sustainability over time for our company, being feasible to penetrate the market in a fast, agile and cost-efficient way, even without any investment.</p> <p>New clients will be reached in events and training workshops organised by KVC or by third-parties; also, a communication strategy will be implemented after the project ends in order to show our work within BOTSTEM.</p>
Training courses on (a) E+ project management	<p>(a) KVC organise a lot of training activities, workdays, workshops and seminars about project proposals preparation and project management; also, on specific programmes, such as MSCA-ITN or SWAFS. The participation in the BOTSTEM project prepares the ground for presenting, also, workshops on Erasmus+ project proposals and project management, using practical examples and success cases, being BOTSTEM the most representative and important.</p>
(b) Education and European Funding Programmes	<p>(b) Education, as well as social sciences and humanities, are frequently ignored or overlooked when talking about European funds, programmes and calls. However, the educational fields require additional expertise for guiding the proposal and the project.</p> <p>KVC has an extensive network of contacts in public and private entities</p>



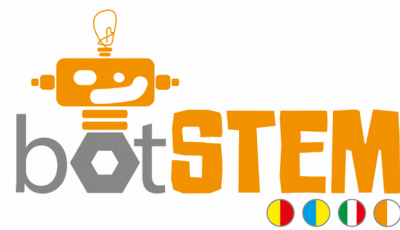
and, currently, carries out a vast amount of courses and seminars, so the implementation of new training days and workshops is in-line with our current activity and 100% viable.

Name of the partner Kristianstad University (HKR)

Activity planned	Strategy and methodology
Define the activity	Describe the event foreseen and to whom It could be addressed
<i>Pre-service education of teachers (preschool and primary school)</i>	<i>HKR will include teaching about research results and experiences from implementation of botSTEM activities in courses of the pre-service teacher programmes at HKR, for both preschool and primary school.</i> Impact assessment: The inclusion of the research results and experiences from the botSTEM project in the guidelines of courses.
<i>In-service education for teachers (preschool and primary school)</i>	<i>Teaching about research results and experiences from implementation of STEM activities in the Toolkit and other activities presented and discussed at botSTEM.org will be included in courses of the pre-service teacher programmes at HKR, for both preschool and primary school.</i> Impact assessment: The inclusion of the research results and experiences from the botSTEM project in the guidelines of courses.
<i>Supervision of academic projects</i>	<i>HKR will supervise Final Degree Projects and Master Theses using the framework and the activities developed in the project.</i> Impact assessment: The number of Final Degree Projects and Master Thesis produced using the framework and the activities
<i>Dissemination activities</i>	<i>HKR will present the results in specialized conferences, as well as write some scientific articles.</i> Impact assessment: The number of conferences and articles derived from the botSTEM project.

Name of the partner - IDEODROMIO 2020-2022

Activity planned	Strategy and methodology
Teacher Trainings	IDEO organises teacher trainings on ICT and STEM related subjects. On an annual basis, we also organise morning workshops where students can visit our premises and participate in 3-hour robotics and programming workshops, funded by local agencies. More than 400 teachers and 6000 students are expected to attend our events during 2018-2019, and the number is expected to increase by 2020. Our intention is to integrate the experience from BotSTEM in our workshops and promote the project to participating



**Impact
Assessment**

teachers.

Teachers are expected to complete questionnaires on the content of the workshop. They are also asked to offer feedback as well as follow-up training events that can offer great insight into how they have implemented knowledge and experience from our trainings.

**Training Courses
to Parents**

Our organisation is interested in parental involvement activities. Therefore, we organise at least 3 major events on a yearly basis with the participation of parents. We intend to introduce concepts from our best practices to these trainings, as well as generate more knowledge through the interaction with parents and their children.

Name of the partner - ADELE ROBOTS

Activity planned Strategy and methodology

Adele Robots is a robotics Company . We put all our energies on finding out the formula to integrate robots into society, making them part of our lives. Day by day we strive to generate new ideas and products that increase the quality of people's life. We also collaborate with our clients to use robotic solutions applied in their daily work, caring for the emotional aspects of the interaction with people. In Adele Robots we want to spread our dream all over the world in order to share it with people who can benefit from it in more social terms such as Health, Education and Customer Relationship.

Adele Robots will include the BotSTEM project in the company web page (www.adelerobots.com) to give a wide visibility of the project. We do not have only Spanish customers but also European and Asiatic. The project information (web page and description about it) will be linked to Next, one of our educational robots that has been included in the project.

We are partners in other european projects and also in robotics associations dealing with robotics in

**Impact
Assessment**

general but also with educational robotics. Our webpage reaches an important number of teachers and educational professionals because of our network of contacts in public and private entities. This will impact in the number of targeted users accessing the project webpage and learning/putting into practice the information included in the project.