

Dissemination and exploitation strategies

STEM dissemination and exploitation strategies are a key component in promoting a new integrated approach to target groups and enhancing STEM education in partner countries.

The aim of dissemination strategy is to influence regional and national STEM developments in partner countries by sharing project best practices.

The aim of exploitation strategy is to demonstrate an effectiveness of new approaches to STEM education and to engage a wider circle of stakeholders in new STEM network activities.

The approach is to take the key stakeholders through a three- stage process: raising awareness, strengthening understanding, and involving stakeholders into project activities.

Dissemination for awareness	Dissemination for understanding	Dissemination for action
First of all, the purpose of dissemination activities is to continuously raise awareness of a wide circle of stakeholders of the project objectives, participants' roles, and expected outcomes	The important function of the dissemination plan is to provide a deeper understanding of project approaches and initiatives for those target groups who will directly benefit from project activities.	A pilot group of stakeholders will be equipped with new skills during the dissemination activities, which will influence STEM regional policies in partner countries. Additional potential applicators will be identified and approached based on the feedback from the pilot group

STEM dissemination will start it in the very beginning from making the project visible on all levels, and implementing main activities throughout the whole project duration at institutional, national and international level. The specific WP 5 will be dedicated to disseminating project deliverables though many relevant events take place in other packages as well.

The leader of the WP 5 is ENU, the co-leader is IKBFU.

The dissemination strategy has been designed to reach the following target groups:

- schools and educational institutions
- educational policy makers (ministries)
- end-users (teachers, students, parents),
- potential business developers.

University teachers: this group comprises teachers engaged in delivering teaching courses in STEM and engineering and natural sciences

Students: enrolled into the new Master program; enrolled into other teaching programs

School Teachers: STEM teachers of pilot schools; STEM teachers of regional schools; STEM teachers at national level

Schoolchildren: enrolled in pilot schools; enrolled in regional schools;

Education organizations: this group represents informal education providers, such as SIRIUS, Kvantorium parks

Ministries of education: Engaging in a dialogue with the ministries is essential to focus their attention on issues of real concern such as students' poor performance in STEM subjects and to get their support for introducing STEM project approach in schools.

Business: This group of stakeholders represents those potential partners who may contribute to bringing real world situations to schoolrooms.

The benefits for various stakeholders

Target group	Benefits
University teachers	New skills in T&A methods, T&L resources
Students	Mobility opportunities, new skills in organizing project activities and promoting STEM
School teachers	New skills, motivated pupils
Schoolchildren	Interesting learning environment
Education organizations	T&L resources
Ministries	Enhanced STEM education in regions
Business	More students interested in STEM careers

The main project deliverables are: STEM best national practices; Master curricula based on integrated approach, Summer school program, Training programs, T&L resources; STEM ambassadors; residential programs; stem centres; stem engagement program; atlas of STEM careers.

Channels of dissemination

The dissemination strategy will employ a combination of written and electronic means and above all personal interaction, including regular press releases as the partnership has the capability of drawing the press' attention. The following concrete measures for an effective dissemination have been planned:

Project web site, media (print, social), special events (STEM days and weeks, festivals), dissemination workshops, conferences, project handbook, video, project presentations, final project conference.

The project web site:

The project web site will be linked to participants' relevant sites, and registered to the main search engines on the Internet. The project website will act as the interface between the consortium and the outside world.

The structure of the web site includes the objectives, the philosophy and the main aspects of the project. There is a provision for including the main deliverables and outcomes of the project, including the teachers training material, the proceedings of the coordination meetings, the reports, project handbook. It will advertise the project events *and will host a public forum as well as teachers' and students' bulletin board.*

Media coverage

An effort will be made to attract the interest of mass media in the project's objectives and outcomes. Project events will be covered by media with press releases.

Social media

The project will use social media (especially Facebook) to publicise STEM deliverables and dissemination activities to key stakeholders and members of the public throughout the duration of the project.

• **Leaflets:**

Leaflets on project summary will be produced in the beginning of the project and on STEM centres' activities during the project life will be produced and distributed to students, and teachers. Posters will be posted in the school message boards advertising STEM days and weeks and festivals.

• **Publications in journals:**

The project participants will be encouraged to submit papers to journals on STEM methodology with presenting project specifics.

• **STEM days, weeks and festivals:**

Open day events will be organised in each of the participating universities to draw the attention of the wider public (parents, ministries, education organizations). At festivals students together with schoolchildren will have the opportunity to present their projects and their activities.

• **Training workshops:**

The project participants are expected to act as trainers disseminating new T&A tools and methods.

Teachers that have themselves experienced upgrading in methodology will be motivated to promote the new approach.

• **Relevant Conferences:** Throughout the project, the consortium members will have an opportunity to present the project and to share best practice at various teachers' conferences and workshops.

• **Dissemination Workshops:**

During the project, the consortium will organize two national dissemination workshops, one in Kazakhstan and one in Russia to inform the academic community of both countries of the project deliverables.

• **Inter-project coaching:** The consortium will contribute to the creation of a working group on education technology in which representatives of other Erasmus+ projects will take part in order to enhance the dissemination of the results. This can create an effective model of project synergy.

Final project conference:

At the end of the project, the final conference will be held in Gelendzhik, at which the project outcomes will be presented to academic community. Representatives of similar projects will be invited to the conferences as well as members of various European STEM groups.

• **Project handbook and video:**

The project handbook and video containing all key aspects of the project implementation will be distributed throughout RU and KZ regions and submitted to the NCPs and ministries.

Project visibility/ raising awareness				
format	Deliverables/ content	Target groups	Deadline	Responsible
leaflets	Project summary	Universities, schools, ministries, NCPs Education organizations	April 2019	ENU IKBFU

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Project Web site	Project summary Participants Schedule of project events Feedback	Project members Public at large	April 2019	SFedU
Newspaper articles (web, print) + press releases	Reports on events	University members Public at large	After each event Linköping Limerick Helsinki Belgorod	Each contact person
Social networks (Facebook)	Reports on events	University members Public at large Other projects	After each event	Each contact person
Project presentations	Project summary	Universities Schools ministries	April-May 2019	Contact persons of partner universities
video	STEM network	Schools Universities Ministries Education organizations	2020	ENU IKBFU
handbook	Best practices+ deliverables	Universities Schools ministries	2020	ENU IKBFU
Promotion materials	Master curricula Summer programs Training programs	School teachers students	2020	Contact persons of partner universities
Raising awareness and raising interest				
Project web site	All deliverables	Public at large	2021	SFedU
Surveys and interviews	Project summary	Teachers Students Education organizations	April 2019	SFedU SSKSU All partner universities
STEM days	Career atlas Promotion materials	Teachers Students Education organizations	Twice a year	All partner universities
STEM weeks	T&L methods Promotion materials	Teachers students	Twice a year	All partner universities
STEM festivals	Career atlas STEM network presentation Project work	Teachers Parents Students schoolchildren	2020 2021	
Regional Workshops	Presentation of Master curricula, training programs	Universities schools		All partner universities
National workshops	Best STEM practices	Universities Ministries		

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		Education organizations		
Inter-project coaching	Best project practices: mapping other initiatives, exchange of information, participation in and organization of joint events	Other EU funded projects	ongoing	All partner universities
Conferences	Project presentations	universities	ongoing	All project members
Final conference	Handbook Video Promotion materials	Project partners Ministries Education organizations universities	September 2021	SFedU
Exploitation of results				
Promotion materials	Master curricula Training programs Summer school Stem centres	Teachers Students Education organizations Ministries universities	Since 2020 ongoing	All partner universities
Training workshops	Training programs	Teachers Other projects	Since 2020 ongoing	All partner universities
STEM centres	Training resources T&L resources	Teachers Schoolchildren students	Since 2020 ongoing	All partner universities
STEM web site	Networking activities	European centres	Since 2021	

The Dissemination and Exploitation plan is developed with regard to the EACEA guidance on Dissemination and exploitation of project results. Dissemination results will be reported in dissemination reports twice a year and uploaded into e-cloud. Each partner will keep track of their reports in dissemination activities in order to provide a means for accountability and improvement. To facilitate this a common template record has been created and is stored on the project website for use by all of the consortium's members.

The template describes the record format for academic dissemination activities, such as conferences, workshops and presentations.

Title of venue

Location

Date

Type (Conference, workshop, presentation)

Partners involved

People involved

Relevance to the project

Resources spent

Dissemination activities will be evaluated by the Quality Committee with regard to dissemination KPIs.

KPIs to measure dissemination performance are:

Web site (updates, number of visits)

Submitted conference papers

Submitted journal papers

Dissemination workshops (number of participants)

Feedback from end-users

Training course (number of trainees)

Number of case studies.

A provisional list of relevant conferences is available in . This list will be updated at least once a year, in order to be up to date with the relevant conferences and events.

Dissemination plan

2019

Deliverables	Target groups	Channels and mechanisms/ <i>kpi</i>	Date/location	resources
Project summary	NCPs Universities Ministries Education organizations	Information leaflets/leaflets in all project languages	April/ Russia, Kazakhstan, Sweden, Ireland, Turkey, Finland	Project funding Universities funding
	Universities Schools	presentations	April/ Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	Universities Education organizations Schools Ministries Public at large	Project web site	April/ SFedU	Project funding SFedU funding
	Ministries Education organizations	Meetings with key stakeholders	April - May/ Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	Other projects academia	Social media/ Facebook	ongoing	ENU and IKBFU SFedU

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Report on needs analysis	Universities Education organizations Schools Ministries Public at large	Project web site	May/ SFedU and SKSU	SFedU funding
	Ministries Education organizations business	Meetings with key stakeholders	May/ Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust-Kamenogorsk	Universities funding
Report on national best practices	Universities Education organizations Schools Ministries Public at large	Project web site	May	project funding
	Universities Education organizations	presentations	June/ Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust-Kamenogorsk	Universities funding
events	Public at large	Media coverage/ press releases/ web articles	March/ Linkoping May/Limerick October/ Helsinki Sites of partner universities	Project funding Universities funding
New skills	Partner universities	Training workshops at universities	June-September / Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust-Kamenogorsk	Universities funding
Master curricula	universities	presentations	November Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust-Kamenogorsk	Universities funding
	students	Promotion materials	November - ongoing / Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust-Kamenogorsk	Universities funding
	academic	Social media/Facebook	ongoing	Project funding Universities funding

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	Universities Education organizations Schools Ministries Public at large	Project web site	December SFedU	Project funding SFedU funding
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Dissemination plan

2020

Deliverables	Target groups	Channels and mechanisms/ <i>kpi</i>	Date/location	resources
Project summary	NCPs Universities Ministries Education organizations	Information leaflets/leaflets in all project languages	ongoing	Project funding Universities funding
	Universities Schools	presentations	ongoing	Universities funding
	Universities Education organizations Schools Ministries Public at large	Project web site	ongoing	Project funding University funding
	Ministries Education organizations	Meetings with key stakeholders	April - May/ Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	Other projects academia	Social media/ Facebook	ongoing	ENU and IKBFU
events	Public at large	Media coverage/ press releases/ web articles	EKSU/October Sites of partner universities	Project funding Universities funding
New skills	Partner universities	Training workshops at	ongoing / Rostov,	Universities funding

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		universities	Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	
STEM centres	Schools	Presentations and meeting Open days	October – December Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	Ministries Education organizations	Meetings Open days	October – December Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
Master's programs	universities	presentations	February- December Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	students	Promotion materials	November - ongoing / Rostov, Belgorod, Kaliningrad, Astana, Shymkent, Ust- Kamenogorsk	Universities funding
	academic	Social media/Facebook	ongoing	Project funding Universities funding
	Universities Education organizations Schools Ministries Public at large	Project web site	December SFedU	Project funding SFedU funding

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