

# Dissemination and communication strategies

**Introduction**: The project is aimed at developing and implementing a new Master's program in STEM subjects based on an integrated approach; at developing new teachers' skills, and at setting up STEM centres as regional resource centres in STEM activities

Mission: To enhance STEM teaching and learning at school and university level

**Vision**: 6 partner regions involved into the project will become national leaders in high-quality STEM education

STEM network will be an integral part of the European STEM community

### **Objectives**:

To raise awareness of project activities

To provide a deeper understanding of project philosophy

To involve local communities into STEM activities

STEM dissemination and communication 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	

#### Messages

Consortium university community: there is an opportunity to be aware of trends in STEM education and to become a part of an international network;

Ministries: universities-project members can help in enhancing regional STEM school education; STEM project is a key to successful STEM career development;

Business: if you invest into STEM activities, you invest into your future staff and into the future of your children

Schools: You need teachers with new skills to raise level of STEM education; we help organize integrated project work to raise children's interest and motivation;

European centres: we want to share best practice; there is a new STEM RU-KZ network

Target group	Raising their awareness	Enhancing their understanding and knowledge	Motivating them to act
Project partners	That we a team and all have a role to play in achieving the project outcomes.	We are to work together and we need to bring our own expertise to the project implementation to make the project a success	To involve as many people as possible into the project implementation
Universities	That STEM education resources can be of use to their courses and programs.	About the main project deliverables, training dates, dates of dissemination events.  Who is involved in project activities to invite to conferences and training workshops.	To link with the project and provide opportunities to present papers at the conferences; to take part in training activities
School teachers	That STEM approach can enhance motivation of schoolchildren	That STEM centres can provide help in organizing project work (beyond class activities) (links to web sites)	That they become involved in retraining activities
Schoolchildren (parents)	STEM is an exciting and fantastic area of studies which can result in a good career	Project universities provide additional opportunities in STEM area	Than they get involved in STEM centres' activities
Education organizations	That STEM project can contribute to their activities	Opportunities, provided by the project in terms of education and training	To share their expertise and infrastructure
Ministries	They have a key responsibility to assess and promote STEM education in regions	All project deliverables	To promote project findings and activities to schools in regions.

European centres	That they will enhance the effectiveness of their work if they collaborate with such a diverse expert group as STEM project	That sharing their experience is helpful and that STEM project resources are available for them.	Link to the STEM project network, provide opportunities for presenting our project
Other European- funded projects	That STEM project can provide an invaluable expertise	The STEM consortium is very open to knowledge sharing and collaborating with Erasmus+ projects on similar topics	To share their best practice

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

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

Media (print, broadcast, social, web)

Promotion (ministries, special interest groups, business)

Marketing (brochures, fliers, video, website, brand)

Events (conferences, meetings, festivals, workshops)

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.

### 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 NEOs and ministries.

#### Project visibility/ raising awareness

Deliverables/format	Deliverables/	Target groups	Deadline	Responsible
leaflets	Project summary	Universities, schools, ministries, NEOs Education organizations	November 2019	ENU IKBFU
Project Web site	Project summary Participants Schedule of project events Feedback	Project members Public at large	November 2019	SFedU
Newspaper articles (web, print) + press releases	Reports on events	University members Public at large	After each event Linkoping 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 ar	nd 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 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 result	ts			
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	

#### General aspects:

A communication and dissemination Action group will be set up. The head of the group is the WP5 leader.

All communication is divided into open, for public use, and confidential, for partners' use.

The coordinator makes an internal e-mail list for internal communication. The project e-cloud will be created for project deliverables and the communication log. A Microsoft group will be set up for drawing up common documents. The WP leader will start a Facebook project group. SFedU will maintain the inter-project Facebook group. The project will use the AIDA model (awareness, interest, desire, action) in communications.

The project will have a recognizable logo. A STEM PowerPoint template is to be produced for all partners to use, when presenting on the project. Media releases for each event must contain STEM logo and EU emblem and statement about the EU funding. All media coverage will be recorded in STEM communication log, which is uploaded at the end of each month in e-cloud.

All communications should be in line with the project Dissemination plan to be developed annually by the action team. The Dissemination 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 is to be created and 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

Evaluation of the communications strategy and dissemination plan implementation will be made twice a year by the Action group. Results will be discussed with the Steering committee. The action group will use quantitative and qualitative criteria to evaluate the communication and dissemination activities.

Quantitative criteria

Event attendance, website visitors, number of recruited students, Submitted conference papers, Submitted journal papers, Dissemination workshops (number of participants), Training course (number of trainees), Number of case studies.

Qualitative criteria

Feedback forms, focus groups, key messages in the media.

Resources: project members; project and universities' funds

#### Risks and mitigation

Competition on local level: to try to involve competitors into the STEM activities; otherwise to be better in offer and implementation.

Weak or no support by the ministries and business: to provide success stories on a regular basis.

Applicants are not interested in the program: a promotion campaign should be launched.

Schools will not support the new approach: a thoroughly worded message with the list of advantages should be elaborated.

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