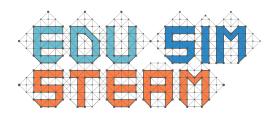


DIRECTORATE GENERAL FOR INNOVATION AND EDUCATIONAL TECHNOLOGIES



Meetings with policy makers and final drafting

EDUSIMSTEAM | Erasmus+ KA3 Forward Looking Cooperation Project



2022

With the support of the Erasmus+ Programme of the European Union Disclaimer | This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



Task 5.2 Meetings with policy makers and final drafting

The project proposal, as part of WP5, states we are to carry out the following task:

All partners will come together with national stakeholder to have a national strategy key items. They will be transferred to WP leader. The main points to be included in final strategy book will be determined. Each meeting should consist of pioneering education faculties, chambers of commerce, large educational organizations and members of Ministries of Education. They will be asked what they expect from STEAM based schooling and country profile in regard to STEAM fields. Consequently, we will look at key strategic issues that partners must consider with regard to their internal environment. The meetings will help us to investigate this project's position, forecasting, strategic planning, and decision making processes. We will also discuss methods of identifying strategic options and deploying strategic analysis to enable STEAM objectives.

The key takeaways from this description are:

- Who is to take part (highlighted in red above)
- What is the focus of these events (highlighted in bold above)

We are proposing that these meetings are organised as focus groups with the national stakeholders' and below is a proposal of the target people for the respective focus group.

Focus Groups	Target people
Ministries	Policy makers
Research centres /	Academics/Teacher
universities	educators/ Research units
Schools / educational platforms	Teachers & School Leaders/ Head Teachers
Local communities (Organization, institution, association, etc.)	Non-formal education settings/ Volunteers/After School STEAM centres
Business/Industry/Chambers of Commerce?	Industry ministries/Industry lobby groups for STEAM and or 21 st century reforms/ Agencies or Non-profits working in STEAM education

Suggested Format

We are suggesting that the focus groups are approximately 1.5 hours (90 minutes) in duration and are organised online or face-to-face, whichever is most appropriate. Depending on the context (i.e. the group in question) the focus groups should gather the views of the attendees on the following areas:

- Meaning / understanding of STEAM education
- How can we make STEAM a priority for all in education
- Challenges and opportunities of STEAM Education
- Awareness /Increasing Participation in STEAM Education What is needed (e.g. strategies, resources etc) to raise awareness and increase participation around STEAM Education?
- Enhancing teachers' capacity specifically in the area of STEAM Education focused on robotics and computational thinking
- STEAM Stakeholder partnerships

We outline a series of potential high-level questions to guide the Focus Group discussions. At our meeting on December 15th we suggested that each Focus Group should start with a presentation that sets the context and tees up the discussion. These were the high levels areas we suggested we can include in the presentation (slides will follow separately):

- Set the context in terms of:
 - The need for 21st century skills
 - The European Policy Context (i.e. <u>EU Digital Education Action Plan</u>)
 - Approaches to STEAM (i.e. subject-based; thematic integrated approach)
- What is needed to make a STEAM a reality?
 - Explore what STEAM looks like in schools
 - Identify the challenges and barriers to making STEAM a reality
 - What is required to make STEAM Education universally available
- EDUSIMSTEAM a Possible Solution
 - The session should end with sharing the project outcomes
 - o Discuss how these outputs might assist in advancing STEAM in future policies

Following each Focus Groups partners should write up the key discussion points and share these with partners. This account should focus on the key policy messages and, where possible, link back to the EDUSIMSTEAM Project deliverables.

This section of the document outlines some additional questions that partners might like to include in their respective Focus Group sessions. Please note that these are suggested questions and partners should include their own, if these are inappropriate.

Post Primary Teachers and Principals - Areas for discussion

1. Understanding of STEAM

What does STEAM mean to you? What does it look like in your classroom or in your school?

2. Challenges and opportunities

What have been the successes for you in implementing STEAM education in your school? What have been the challenges for you in implementing STEAM Education in your school?

3. Awareness /Increasing Participation in STEAM Education

What is needed (e.g. strategies, resources etc) within your schools to raise awareness and increase participation around STEAM Education in your school?

What kinds of STEAM educational activities are students introduced to in school and why?

4. Teacher Capacity

What would help to further develop STEAM teacher capacity in your school? Are teachers using robotics and computational thinking approaches in STEAM education?

5. STEAM Learning and Assessment

How is STEAM education timetabled in your school? How can STEAM learning and assessment practices be enhanced in your school?

6. STEAM Stakeholder partnerships

Does your school have partnerships with external STEAM stakeholders such as business/industry, third level institutions, etc.?

Ministries - Areas for discussion

1. Understanding of STEAM

What does STEAM mean to you? What does it look like in schools?

2. Challenges and opportunities

What have been the successes for you in implementing STEAM education in the education system?

What have been the challenges for you in implementing STEAM Education in the system?

3. STEAM Policies

How is STEAM education being addressed within your policies and programmes? Do you have a separate policy or is it embedded across other policies? How is STEAM education addressed in the school curricula?

4. Supporting Schools & Teacher Capacity

What current supports are provided to teachers to activate STEAM learning activities in their classrooms?

Are there ways in which the ministry/department could better support the education sector in raising awareness and promoting STEAM education and the possibilities of undertaking STEAM careers?

How can the ministry/department, in collaboration with other Ministries or stakeholders, provide better support to STEAM education?

5. STEAM Stakeholder partnership

What could facilitate greater uptake of STEAM education in schools? How might schools best utilise the outputs from the EduSimSteam project in the future?

Local communities (Organization, institution, association, etc.) - Areas for discussion

1. Understanding of STEAM

What does STEAM mean to you Can you provide examples of STEAM engagement in informal contexts?

2. Barriers and Enablers

What kind of STEAM activities are offered to learners outside of formal school? What are the barriers and enablers you see to STEAM engagement? How are students introduced to coding, robotics education and/or computational thinking?

3. Supports

What actions would you suggest need to be taken to broaden and develop informal STEAM engagement in your community?

How might non-formal education providers utilise the EduSimSteam Project resources and outputs?

What additional supports are needed to enable non-formal education providers to design and offer STEAM learning experiences using robotics and computational thinking approaches?

Business/Industry/Chambers of Commerce - Areas for discussion

1. Understanding of STEAM

What does STEAM mean to you

2. Business/ Industry Support to Schools

In what way could business/industry engage with and support schools in promotion of STEAM?

3. Business/Industry Equity of Access

Are there ways in which better business/industry collaboration and coordination with schools could ensure greater equity of access to all learners?

What actions would you suggest need to be taken to broaden and develop informal STEAM engagement?

4. Awareness

Are there ways in which business/industry could support the education sector in raising awareness and promoting STEAM education and the opportunities in STEAM careers?

Research centres / universities

1. Understanding of STEAM

What does STEAM education look like in your institution?

What does STEAM education mean to you?

2. What are the opportunities and challenges of implementing STEAM in schools? What kinds of activities do students engage with during STEAM education? What are the major challenges to develop STEAM competences in students?

3. What could facilitate greater engagement with STEAM education in schools?

What kinds of resources might teachers and students need to engage in STEAM education? What kinds of supports are needed to encourage the use of robotics and computational thinking approaches in schools?

4. Are there ways in which universities, initial teacher education institutions and research centres could better support the education sector in raising awareness and promoting STEAM education and the opportunities in STEM careers?

What kinds of additional supports can higher education institutions provide to support STEAM in schools?

What additional supports do higher education institutions need to better meet the needs of schools and of society in relation to STEAM education

How can universities and research centres use the resources from the EduSimSteam Project in the future?