



ASEF Classroom Network #ASEFClassNet Online Collaboration 2018

Proposal

1. Title of the Online Collaboration (Max. 6 words)

Great Minds in STEM, Bridging the Gap

2. Name and contact details of project co-ordinator(s)

Mr Seppe HERMANS

STEM Teacher

Spechtrum School

Belgium

E: Seppe.Hermans@spectrumschool.be

Mrs Masinah SAHID

Science Teacher

SMK Jeram

Malaysia

E: smasinah@yahoo.com

3. School description (Max. 30 words)

Spectrum school is a vocational and technical school located in Antwerp, the second biggest city in Belgium. There are about 1,100 students that represent over 60 different nationalities.

SMK Jeram is a national secondary school in Malaysia. It is located 60km from Kuala Lumpur. There are about 1,300 students that consist of Malay, Indian and Chinese, age between 13 to 17 years old.

4. Summary of the Proposed Online Collaboration (Max. 200 words)

"Great Minds in STEM, Bridging the Gap" invites students from Asia and Europe to share the application of Science, Technology, Engineering and Mathematics in schools. Rather than to teach the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world. Since STEM is relatively new to us, students and teachers from Asia and Europe will be able to get better understanding of the topics by sharing information on the importance of STEM subjects and how they are taught in the schools. Hopefully it can tackle any misconceptions on STEM and create conducive and happy learning environment in the schools.

We will also discuss the STEM-professions in different countries during the collaboration. Bridging the gap of gender in STEM is also a point to be highlighted that enable us to identify any differences based on different cultures of Asia and Europe. The students are encouraged to set a project, based on STEM and share it among the peers by producing a video, articles or graphics and publish it through multi-media platforms. The videos and articles will be compiled in BlogSpot or a website that can be shared with our community and the public. It is also a good way to enhance our ICT skills and at the same time strengthen teamwork.

Join us and have a great mind in STEM!

**5. The Online Collaboration falls under the main themes of:
Please state "1" to "3" in level of relevance**

<input type="checkbox"/> Arts & Culture	<input type="checkbox"/> Health
<input type="checkbox"/> Business & Entrepreneurship	<input type="checkbox"/> History
<input checked="" type="checkbox"/> 2 Education	<input type="checkbox"/> Media
<input type="checkbox"/> Environment & Sustainable Development	<input checked="" type="checkbox"/> 1 Science & Technology
<input type="checkbox"/> Others. Please specify below:	

6. Duration of the Online Collaboration (Please state start and end date):

Start Date	:	5 March 2018
End Date	:	1 September 2018
Duration	:	5 months

7. Expected no. of schools/students involved and level of language and ICT skills

No. of Schools in total	:	6
No. of Students in total	:	60
Students Age Group	:	12-17
Level of English	:	Intermediate
Level of ICT Skills	:	Intermediate

**8. ICT tools/software required
Please tick (✓) as appropriate)**

<u>Word processing software</u>	<u>Video conference tools</u>	<u>Storage tools</u>
<input type="checkbox"/> Adobe Acrobat Reader	<input type="checkbox"/> Skype	<input checked="" type="checkbox"/> Dropbox
<input checked="" type="checkbox"/> Google Docs/Sheets	<input type="checkbox"/> Viber	<input checked="" type="checkbox"/> Google Drive
<input checked="" type="checkbox"/> Microsoft Word/Excel	<input type="checkbox"/> Vyew	<input type="checkbox"/> iCloud
<input type="checkbox"/> Scribd	<input type="checkbox"/> Wechat	
<input type="checkbox"/> Wordpress		

<p><u>Social media</u></p> <input type="checkbox"/> Ask.fm <input checked="" type="checkbox"/> Facebook <input type="checkbox"/> Flickr <input checked="" type="checkbox"/> Instagram <input type="checkbox"/> Pinterest <input type="checkbox"/> Tumblr <input type="checkbox"/> Twitter <input type="checkbox"/> Weibo	<p><u>Image editing software</u></p> <input type="checkbox"/> Adobe Illustrator <input type="checkbox"/> Adobe Lightroom <input type="checkbox"/> Adobe Photoshop <input type="checkbox"/> BeFunky (online) <input type="checkbox"/> Sketch (Mac only)	<p><u>Online collaboration</u></p> <input type="checkbox"/> Mindmeister <input type="checkbox"/> Slack <input type="checkbox"/> Telegram <input type="checkbox"/> Trello
<p><u>Video/audio editing software</u></p> <input type="checkbox"/> Adobe Premiere <input type="checkbox"/> Audacity <input type="checkbox"/> Garageband (Mac only) <input type="checkbox"/> Soundcloud <input checked="" type="checkbox"/> Windows Movie Maker <input checked="" type="checkbox"/> Youtube	<p><u>Presentation</u></p> <input type="checkbox"/> Google slides <input checked="" type="checkbox"/> Microsoft Powerpoint <input checked="" type="checkbox"/> Prezi	<p><u>App development</u></p> <input type="checkbox"/> Adobe Flash builder <input type="checkbox"/> Alpha Software <input type="checkbox"/> Appy Pie
<p><u>Others (please specify):</u></p>		

9. Other resources needed:
(Please tick (✓) as appropriate)

<input checked="" type="checkbox"/> Camera	<input type="checkbox"/> E-reader	<input type="checkbox"/> OHP
<input checked="" type="checkbox"/> Desktop Computer/Laptop	<input type="checkbox"/> GoPro	<input checked="" type="checkbox"/> Smart Phones
<input checked="" type="checkbox"/> Digital Projector	<input type="checkbox"/> Interactive Whiteboard	<input checked="" type="checkbox"/> Tablet
<input checked="" type="checkbox"/> Voice Recording Devices	<input type="checkbox"/> NA	
<p><u>Others (please specify):</u></p>		

10. Learning objectives and outcomes for teachers and students

(Please list at least 3 learning objectives and outcomes for teachers and students respectively.)

Learning Objectives	Outcomes
Teachers should join to:	For Teachers:
1. Share knowledge on STEM	1. Sharing articles and videos on STEM
2. Create a better network and intercultural understanding between teachers from Asia and Europe.	2. New network among teachers from Asia and Europe.
3. Increase ICT skills.	3. Skills on using ICT and tools for online projects.
4. Tackle misconceptions among students around STEM.	4. Discuss the importance of STEM, STEM-profession and equality in STEM.
Students will learn to:	For Students:
1. Understand the idea of STEM and STEM-professions in different countries.	1. Sharing science articles in written form and videos.
2. Use tools and ICT for online collaboration	2. Online discussion on Facebook and BlogSpot and use ICT tools to produce videos.
3. Work as a team.	3. Videos and presentations of their conclusions.
4. Enhance multicultural understanding.	4. New network among students.

11. Timeline and activities of the Online Collaboration

	<u>Main Coordinator</u>	<u>Teachers</u>	<u>Students</u>
Phase 1 (March 2018)			
▪ Set-up Facebook group and invite members to the group.	✓		
▪ Self-introduction by all participating members.		✓	✓
First Task: 1. Discuss the meaning of STEM 2. Present the importance of STEM subjects and how they are taught in your school/country.		✓	✓
▪ Create team work to carry out the Tasks		✓	✓
Phase 2 (April to June 2018)			
Second Task: 1. Choose an interesting STEM-profession , discuss and present its importance. Which skills do you need? What do you need to study? What role does it play in your country?		✓	✓
2. Create a project based on STEM and shared it in video form or text and graphic form and share it in online platform.		✓	✓

3. Monitoring the discussion.	✓		
Phase 3 (July to August 2018)			
Third Task:			
1. Equality in STEM. What does it mean? Why are there less girls in STEM? Is this the case in your school/country? Is there a cultural difference?		✓	✓
2. Think of a way to counter misconceptions in STEM			
▪ Upload information on the online platform.		✓	✓
▪ Monitoring the discussion.	✓		
Phase 4 (August to September 2018)			
▪ Compile videos and articles in the website.	✓		
▪ Showcase of the research in the respective countries.	✓	✓	✓
▪ Sharing website with the local community.	✓	✓	✓
▪ Feedback and evaluation.	✓	✓	✓

For further details about this online collaboration, please contact the coordinator directly

.....



ASEF's contribution is with the financial support of the European Union.