



# ASEF Classroom Network (ClassNet) ASEF ClassNet Online Collaboration 2016

## Factsheet

### NAME AND CONTACT DETAILS OF PROJECT CO-ORDINATOR(S)

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### NAME AND MAILING ADDRESS OF HIGH SCHOOL OR SECONDARY SCHOOL:

Pocheon High School  
Cheongsung Elementary School

### COUNTRY:

South Korea

### PROPOSED PROJECT NAME:

Fix by Software Education  
(Real World Problem Solving by Software Education)

### PROJECT DESCRIPTION / SUMMARY

In “Fix by Software Education” students learn how to use physical computing tools (such as the Hamster Education robot, Scratch (entry), and Arduino) and try to solve real world problems. Through Padlet and Facebook, ideas about problems that can be solved, shared and discussed. The solutions will come through 48-hour hack-a-thons. Contests between the schools will be organised, where students can share their experiences and compete against each other with their creations. The Online Collaboration ends with instruction videos made by the students, teaching the wider community how to fix problems by creating and using software. The project enhances creativity and problem solving skills through the usage of ICT and coding.

## OBJECTIVES AND EXPECTED OUTCOME OF THE PROJECT:

The objectives of the project are to:

- Enhance student's problem solving skills based on Computational Thinking
- Gain skills that are useful to student getting a future job

### Expected Outcome

#### *Tangible*

- Padlet for students to discuss students' idea and their interaction
- Facebook Group for students and teachers to share the making club's curriculum and its activities, to reflect on how the students will have progressed, and how teachers deal with challenges and overcome it by using software tools
- Video clip about how to operate the devices
- Conferences and contests among the schools
- Teacher training

#### *Intangible*

- Students can improve a basic knowledge of coding program: Scratch(entry)
- Handle the physical computing tools: Hamster robot, Arduino
- Encourage collaboration and communication skills through activities.

## TIMELINE AND PHASES OF THE PROJECT

### **Phase 1 (January 2016)**

- Set-up Facebook group and invite members to the group
- Self-introduction by all participating members
- Organisers show how to handle the physical devices

### **Phase 2 (February to March 2016)**

- Pick up real world problems in the classroom
- Upload the problem on Padlet

### **Phase 3 (April to Aug 2016)**

- Hack-a-thons will be held to discuss solutions

### **Phase 4 (Aug 2016)**

- Feedback and evaluation
- Sharing the making films (interview, output etc.)

## EXPECTED CONTRIBUTION FROM ASIAN SCHOOLS/STUDENTS:

- Be creative
- Share and learn from other students
- Contribute in tasks of the group through chat, email, Facebook
- Know and work with High Technology Skills for schools and students
- Enhance Computational Thinking ability for students

**EXPECTED CONTRIBUTION FROM EUROPEAN SCHOOLS/STUDENTS:**

As above.

**THE PROJECT FALLS UNDER THE MAIN THEME FOR:**

Please tick (✓) only one main theme

Culture

Governance

Economy

Public Health

Education

Sustainable Development

Others. Please specify below:  
Computer Science, STEAM

**MINIMUM NUMBER OF SCHOOLS/STUDENTS INVOLVED:**

No. of Schools / Students : 10 schools / 10 students from each school

Students Age Group : 11 – 17

Level of English : Basic

**PROPOSED DURATION OF PROJECT (PLEASE STATE TENTATIVE START AND END DATE):**

Duration : 8 months

Start Date : 2 January 2015

End Date : 30 August 2015

**ICT TOOLS / SOFTWARE REQUIRED:**

- Laptop/PC/Smart devices
- Educational Robot like Hamster robot / Arduino / Scratch, Entry
- Padlet, Facebook

**ADDITIONAL RESOURCES NEEDED:**

NA

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