

Makerspace Contest

Design and Create 设计和创造竞赛



Winnie Wong, Ph.D. 黄颖妍博士

Every two years, Evergreen Education Foundation (EEF) hosts international conference and workshops in China to promote and strengthen the use of libraries. This year, our conference theme is MAKERSPACE. In light of our theme, the foundation announced the ITIE 2016 Makerspace: Design & Create Contest in May 2016. This contest was open to students attending 6th grade to 12th grade from Mainland China, Hong Kong China, and USA.

Guide by their teachers and mentors, students are challenged to use their creativity to complete two tasks:

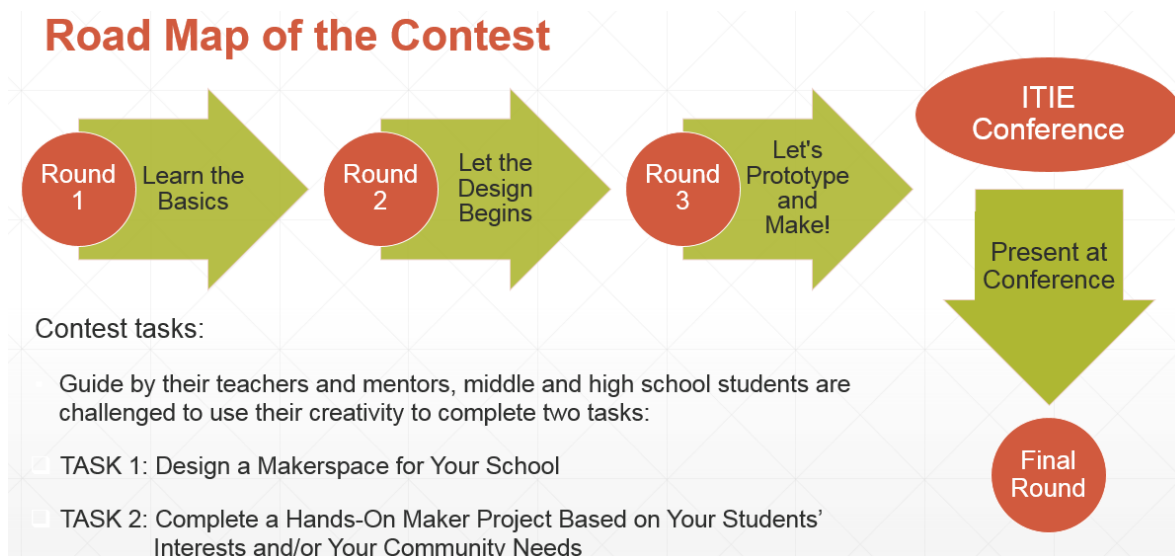
TASK 1: Design a Makerspace for Your School, which includes tool list and budget

TASK 2: Complete a Hands-On Maker Project Based on Your Students' Interests or Your Community Needs

This contest aimed to give teachers and students an opportunity to learn and think about how to design an actual functional makerspace for their school as well as a chance to complete a hands-on maker project based on students' interests or community needs. By carrying out this exercise, participants will gain invaluable insights on the theoretical and practical aspects of designing and creating through makerspace for their school. Students will also gain vital skills required to be successful in life. These skills include critical thinking, teamwork, planning, budgeting, organizing, and time management. It also allows them the opportunity to discover, try new ideas, and learn the importance of the iterative process. Most of all it provides the basis for their becoming positive contributing members of society with an understanding of their interests and capabilities. The combination of theoretical design and hands-on application will solidify the innovation, design, and making process.

In addition, EEF offers up to US\$200.00 of grant money on task 2 material subsidies for each school. Through the application procedure, EEF intends to provide an opportunity for teachers and students to experience the process of applying for grant funding, which is a crucial skill for seeking capital backing for projects of any form. Last but not least, each team will be asked to compile a wish list such as books, equipment, or products that is worth up to US\$3500.00.

Due to a narrow application window (only 3 weeks), we managed to interest 24 schools in total: 17 schools in China, 3 schools in Hong Kong, and 4 schools in USA. Fourteen schools put in an application: 10 schools in China, 1 school in Hong Kong and 3 schools in USA. These schools had none or very little knowledge of Makerspaces and hands-on projects.



Between the Novice level and Advanced Beginner level the contest put forth, all of these 14 schools self-chosen to be at the Novice level. After Round 1, 2 USA schools and 1 Hong Kong school were promoted to the Advanced Beginner level. At Novice level, only 7 China schools and 1 USA school remained. All these remaining 11 schools moved pass Round 2 and were all in Round 3 of the competition. They were all invited to the ITIE 2016 international conference and workshop at Shenzhen and Guangzhou where they got to visit the ChaiHuo Makerspace and present their work at their exhibition booth. The top scoring 6 schools in Round 3 were also invited to Wuhan University for a PowerPoint presentation of their work in front of school principals and high level administrators. As this article being published, the contest is in its Final Round. Submittal is due December 19th, 2016 and awards will be announced by December 30th, 2016.

The contest committee would like to share with you some of the comments and reflections from teachers and students from the contest as well as some snap shots of the teams at the conference.

“As a maker, the most important thing is to make what we want, let our ideas become reality while benefiting the community. In makerspaces, I have learned to improve my ability to manipulate, to think creatively, and to combine theory and application. In addition, I experienced, first hand, the power of teamwork. So I think we should embrace this wonderful creative spirit.” – Yijie Zhou, Student, Shaanxi Danfeng High School, China

“I felt the charm of the makerspace. I also experienced the happiness making hands-on projects brings me.” – Xiaoyang Zhang, Student, Shaanxi Danfeng High School, China

“The makerspace experience has unlocked a new potential for the teaching and learning connection. It has implications for more than just my classroom and curriculum, it holds the potential to reach students and their creativity I’ve not been able to tap as yet. It may be a way of reaching other teachers as well as students.” – Dale Griepenstroh, Teacher, Chula Vista High School, USA

“I have gained experience such as: learning to present and enhancing my creativity in designing projects.” – Kyle Chan, Student, Ralston Middle School, USA

“I helped me learn the importance of teamwork, the design process when creating something.” – Ethan Chan, Student, Ralston Middle School, USA

“The conference not only enriches my knowledge in design, management and promoting Makerspace, but also arouses students’ interests in making and establishes a making atmosphere at a preliminary level at school.” – Stanley Kam, Teacher, HKSKH Bishop Hall Secondary School, Hong Kong

“I am glad to participate in this contest and proud of having chance to attend an international conference. I enjoyed it so much.” – Lam King Hei, Student, HKSKH Bishop Hall Secondary School, Hong Kong

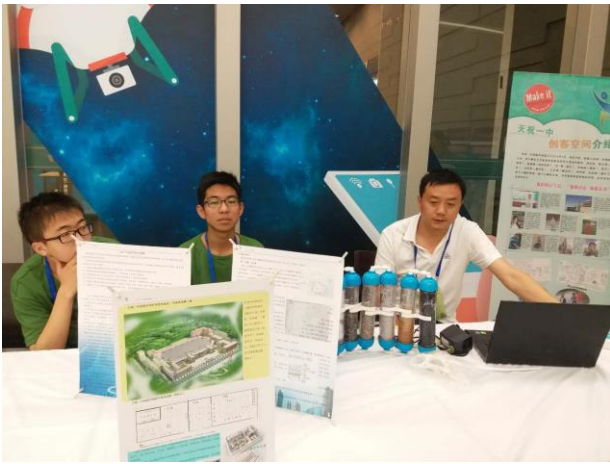
“After attending the contest, I become more interested in creation. In order to get inspiration in making, I more concentrate on everyone and everything around me.” – Chong Chi Kit, Student, HKSKH Bishop Hall Secondary School, Hong Kong



Students being interviewed at Wuhan University



Visiting ChaiHuo Makerspace in Shenzhen



At exhibition booth, Guangzhou, China



At exhibition booth, Guangzhou, China



At exhibition booth, Guangzhou, China



At exhibition booth, Guangzhou, China



At exhibition booth, Guangzhou, China



At exhibition booth, Guangzhou, China

The contest committee hopes to continue organizing contests to encourage rural area schools' involvement and participation of Makerspace and making. Stay tuned for our next adventure with our schools!