

The Singapore Mathematics Project Festival: A Note from the Coordinator

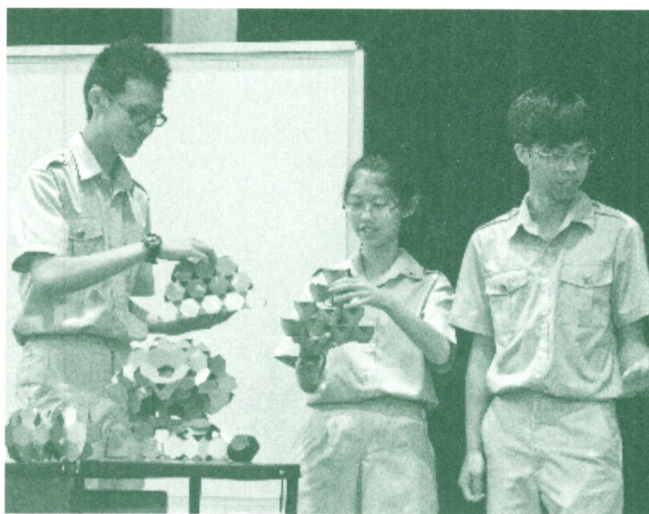
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Coming to the 21st century, mathematics becomes more useful in almost all areas: actuarial science, biology, economics, finance, logistics, medicine, etc. In recognition of the fact that creative and innovative work may best be reflected in project work, the Singapore Mathematical Project Festival (SMPF) was inaugurated by Singapore Mathematical Society (SMS) in 2001. One of the main objectives of the SMPF is to raise awareness among the educational fraternity on the importance of project-based learning. The SMPF also provides a platform for secondary school students to share their research work in mathematics.

I was involved in SMPF since 2011 as a judge for the junior session. I was really fascinated by the many beautiful and fantastic projects — some derived theoretical formulas, while others applied sophisticated mathematics in real-world context. In 2012, I was appointed the coordinator of SMPF. This opportunity gave me a better chance to enjoy the creative mathematical projects.

Each year approximately 100 students from about 15 schools contribute 40 projects to SMPF. The projects cover many of the interesting areas in mathematics and its applications. More importantly, the teams generally do not repeat the mathematical topics from the teams of previous years. The participating teams try to discover new topics and new areas by themselves; and indeed, many of them are very successful. For instance, there were many good projects on different topics of graph theory in 2012; and many interesting and thought-provoking mathematical games in



2014. This year, the focus has changed to geometry – 9 out of 11 projects selected in the final round are in geometry! I am looking forward the new topics that will emerge in SMPFT in the following years.

Comparing with Singapore Mathematical Olympiad, which has approximately 10000 participants, the number of participants of SMPF is relatively small. However, I believe that this figure will grow when more teachers and students realize the importance of mathematical learning and exploration in project-based activities and collaborative learning.

I would like to express my appreciation to

- Schools: The principals, heads of department, and the teachers-in-charge encourage teachers and students to participate in the competition. The schools kindly provide also the financial support and logistic support to host the competition.
- Supervisors: A project can never be successful without good guidance. Supervisors are always around if the students need any assistant.
- Judges: They do not only grade the students, but also provide the feedbacks which help supervisors and students to improve their further work.
- Students: How can I forget our lovely students? Every student is full of power and patient in mathematics.

