

# 第23屆香港青少年科技創新大賽

## 23rd Hong Kong Youth Science & Technology Innovation Competition

### Guideline of Outstanding STEM School Report

Provide each of the following content with **no more than 1000 words** and **3 photos**.

#### 1. School introduction

Introduce the scale, goals and features of the school

#### 2. Philosophy of science and technology education

2.1 The philosophy your school adapted in science and technology education;

2.2 Practices to achieve the above philosophy;

- Incentives to outstanding science and technology teachers and students such as rewards;
- How to sustainably implement the policy and practices;

#### 3. Promotion of science and technology education inside and outside school

##### 3.1 Participation scale and school practice to promote science and technology education:

3.1.1 Participation scale in school science and technology education;

- Ratios of students participating in science and technology curriculum , activities, school teams and science competition;

3.1.2 Methods or action taken by school to promote science and technology education in schools;

- Data collection or analysis to look into students' involvement in science and technology programmes and activities, ways of communication between school, parents and students to inform students' participation in science and technology education;

##### 3.2 Science and technology courses or programmes:

3.2.1 Are there any school-based programmes in science and technology education? If yes, please list the time, content, features, targets and other relevant information;

3.2.2 Measures taken to evaluate the teaching quality of science and technology courses or programmes;

3.2.3 Are there any systematical ways to teach students research methods during science and technology education;

##### 3.3 Teaching strategies:

3.3.1 Effective teaching strategies taken to achieve the goal of science and technology courses or programmes;

3.3.2 Measures taken by school to fulfill different student needs and implement science and technology for all education strategy to encourage and nurture students' interest in the field.;

### **3.4 Science and technology activities:**

3.4.1 Ways to encourage students to participate campus and off-campus science and technology activities;

3.4.2 Activities organized by the school, such as science festival, interest groups, or science competitions;

3.4.3 How school utilize the resources in the public to organize science and technology activities;

## **4. Professional development and effective resource investment**

### **4.1 Professional training of science and technology teachers:**

4.1.1 Ratio of school science and technology teachers to students, education level and seniority of science and technology teachers;

4.1.2 Measures of school to provide professional trainings for teachers

- Such as supporting teachers to participate trainings, forming teaching groups in science and technology education;

4.1.3 Description of policies or measures to encourage teachers carry out teaching and research activities;

### **4.2 Effective investment of resources and school infrastructure:**

4.2.1 Resources provide by school (including financial, human resources, etc.) to support the organization of science and technology and activities;

4.2.2 Facilities, equipments and teaching resources owned by school to provide science and technology programmes and activities, such as computer rooms, laboratories..etc.;

4.2.3 List out the usage of those infrastructure and teaching resources;

4.2.4 Describe school efforts to expand or retain those facilities and resources.

## **5. Achievement outside school in science and technology**

Listed the school achievements in the following table between 1 September 2016 and 31 December 2020 in science and technology education (up to 10 awards , **please list the awards in chronological order**)

No.	Period	Name of project	Name of award	Name of competition or activities	Organizer
Example	August 2017	Smart Home	First Place award	China Adolescents Science & Technology Innovation Contest 17-18	Chinese Association for Science & Technology