



# NEWSLETTER

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### ASTI's List of Projects

## HEADLINES

**ASTI wishes everyone a very Happy & Prosperous New Year!**

### ASTI's List of Projects

We would continue with our various projects for 2022 which we have converted online to empower young people in this period of pandemic. The planned projects for this year include:

- ❖ Science Fair for Young Children (SFYC)
- ❖ Young Inventors Challenge (YIC) Special Edition
- ❖ ASTI Feynman Challenge (AFC)
- ❖ ASTI's Recover Project (ARP)
- ❖ Young Inventors Journal (YIJ)

We would organise the below listed projects physically if situation permits:

- ❖ ASTI Leap Challenge (ALC)
- ❖ Green Makers Challenge (GMC)

Meanwhile, ASTI's Collaborative Project planned for 2022 include:

- ❖ Science Film Festival with Goethe Institute Malaysia

We are looking into other new and existing projects for this year too.

**Join us on this journey!**



### **Science Fair for Young Children (SFYC)**

Science Fair for Young Children (SFYC) is our premier project in Malaysia for the younger generation to increase their interest in science. Our children need to be totally involved and immersed in the learning of science and exercise their scientific skills through science-based activities which are fun and exciting. ASTI believes that the best way to learn science is by doing experiments and drawing an inference from it rather than just reading, understanding and remembering the contents. Besides organising the fair at state and national levels, the SFYC organising team also empowers and encourages the schools to hold their own school level science fairs (SLSF) or Home-Based Science Fair (HBSF). SFYC 2020 and 2021 was conducted online with Experiment Video and Poster submission due to the outbreak of Covid-19 and online learning in the schools.

### **Young Inventors Challenge (YIC)**

Young Inventors Challenge (YIC) requires teams of up to 3-5 secondary school students to put their minds together and come up with an invention/innovation. The purpose of the programme is to help build and encourage the creative and inventive capability among young people. ASTI started this program in 2013 as a pilot and the response have been remarkable ever since i.e. we have been growing at almost 100percent year on year.

### **ASTI Feynman Challenge (AFC)**

ASTI Feynman Challenge (AFC) is a project designed in the times of the COVID-19 Lockdown in 2020. We conducted this competition on-line for all communities which includes families, refugees, orphanages, etc. We believe that the learning process should never stop no matter what the circumstances. ASTI Feynman Challenge is an online challenge where the students work as a team with a minimum of 2 person per team. The teams can be made up of parent and children, brothers and sisters, friends and study buddies. The teams are to invent something (tool/ method) to explain a scientific principle that they have learnt (or going to learn) in school. The team must then video tape their explanation of the scientific concept. Each video should not be more than 5 minutes long which is uploaded into a YouTube channel.

### **ASTI's Recovery Project (ARP)**

ASTI's Recovery Project (ARP) which is a 2-year recovery plan to help students get back on their feet to meet their learning needs in order for them to fulfil their dreams of becoming a meaningful member of the society. The A-PLUS and ASTI STEM ACADEMY are projects under ASTI's Recovery Project.

The A-PLUS (ASTI Progressively Learning and Understanding Science) which has been piloted for form 1 students since 2018 is run as workshops focusing on experimentation and activities. ASTI has developed Modules in Science for Year 1 to 6 as well as Form 1 Malaysian syllabus. Meanwhile ASTI STEM ACADEMY (ASA) is a portal to help students from Year 1 to 6 evaluate their current levels of understanding of a particular topic via regular self-assessment. The self-assessment would be in the form of a quiz that would be uploaded into ASA's website. The students would sit for the quiz on a regular basis and marks would be given to the students to be able to assess their current levels of understanding. The process can be facilitated by their teachers and/or parents. The quizzes are available in English and Tamil languages initially.





### **Young Inventors Journal (YIJ)**

YIJ is a free online research journal that is earmarked towards younger generation to increase their interest, get involved and immersed in learning in science, technology and innovation. Accordingly, our journal hopes to help the young generation to explore new ideas and inventions in a systemic manner.

ASTI organised a paper writing competition under Young Inventors Journal with the general theme of “How to Conserve and Save Water” for students aged between 13 and 18 years old in 2019. This was the first time ASTI and YIJ helped organised a pilot programme of this kind. With the success of the first paper writing competition, ASTI continued to organise the second paper writing competition titled “How to Rebuild a Better World Post Covid-19” focusing on education. In July 2021, ASTI again officially launched the third paper writing competition on the topic “HOW TO REBUILD A BETTER WORLD POST COVID-19: MENTAL HEALTH & SOCIAL WELL-BEING” which focuses on Social and Mental issues that are being faced by modern society and how we can help produce a better solution for the future. For the year 2022, we will be launching our fourth paper writing competition on the topic “HOW TO REBUILD A BETTER WORLD POST COVID-19: ENVIRONMENT & ECOLOGY.



### **ASTI Leap Challenge (ALC)**

ASTI Leap Challenge (ALC) hopes to prepare students to participate in higher level National and International competitions including Young Inventors Challenge (YIC) which is an international innovation challenge run by ASTI. ALC focuses on experiential learning and on hands-on activities to build confidence among young people especially in the world of problem solving and building solutions via invention and innovation. The programme uses the Project Based Learning (PBL) approach. With ALC, the teachers and students from potential schools are trained to conduct their own school level ASTI Leap Challenge (SL-ALC). SL-ALC will help students develop their creative and critical thinking, and problem-solving skills. The project comprises of 3 trainings and a competition.

### **Green Makers Challenge (GMC)**

Green Makers Challenge aims is to expose secondary school students to the world of invention and innovation in a very hands-on manner. The goal is to help students to enhance their creative, critical, and problem-solving skills. The project will start with promotions and interested schools/teams to submit invention/innovation proposals. The schools are eligible to send as many teams as possible but each team can only submit one proposal. Each team of participants is made up of 3 – 5 students. The targeted states are Johor, Melaka, Pahang, Sabah, Sarawak, Penang, Perlis, Kedah, Kelantan and Selangor. This a programme for Secondary school students aged 14-16 years old. The target group will be more focused on female students, students from B40 Communities, indigenous communities and refugees' students.