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SCIENCE அறிக்கை FAIR for YOUNG CHILDREN REPORT 2015

Science Fair for Young Children 2015 Report

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ABBREVIATIONS

ISRO	Indian Space Research Organisation
MITC	Melaka International Trade Centre
MCEF	Malaysian Community & Education Foundation
MGB	Majlis Guru Besar
NGO	Non Governmental Organization
NLFCS	National Land Finance Co Operative Society
PERINNBAM	Pertubuhan Kebajikan dan Amal India Baru Malaysia
PR	Public Relations
PPT	Power Point Presentation
Q&A	Question and Answer
ZLSF	Zone Level Science Fair
SLSF	School Level Science Fair
SFYC	Science Fair for Young Children
NSFYC	National Science Fair for Young Children
USM	Universiti Sains Malaysia
UM	Universiti Malaya
WGC	Working Group Committee
Youth MC	Pertubuhan Graduan Belia India


ence Fair for Young Children
SFYC

EXECUTIVE SUMMARY

Science Fair for Young Children, SFYC, is a programme held annually among Tamils Schools nationwide to encourage science learning among primary school children. Science fair started as a pilot project back in 2007 focussing only in Selangor and Kuala Lumpur, Wilayah Persekutuan. The following year, science fair became an event held nationwide with more and more schools participating every year. Science fair has been a platform and an opportunity for young children to showcase their scientific knowledge and skills. The project has brought together schools from the entire country for the sole purpose of participating and excelling. Science Fair's success has enabled the organisers to conduct the fair at 3 levels; which is school, zone and national level.

The organisers ensure that teachers training are conducted every year for school level and zone level science fair to be held smoothly. This year we combined both school level and zone level trainings. In 2015, a total of 327 schools participated in School Level Science Fairs. Meanwhile, for the zone level, 221 schools participated in the Zone Level Science Fairs held in 9 zones. The National Science Fair for Young Children was held on 3rd October 2015 at Manipal International University, Nilai. The best 60 teams were selected from the zone level to take part in the national event. In addition to the overall category, prizes were also given for Innovation Category and Research Paper Category.

Some of NSFYC 2015 participating teams took part in other competitions after the national event. Five teams from SJKT Jalan Yahya Awal, one team from SJKT Ramakrishna and one team from SJKT Sungai Ara took part in Kuala Lumpur Engineering Science Fair held from 30th Oct till 1st Nov 2015. SJKT Jalan Yahya Awal won bronze in student's category for their innovation with their High Precision Calorimeter. About 200 teams participated in this fair. SJKT Sungai Ular participated in Penang International Innovation Competition and won Bronze Medal. Three teams from SJKT Jalan Yahya Awal, one from SJKT Taman Tun Aminah, one from SJKT Kulai Besar and one from SJKT Kangkar Pulai participated in the International Invention, Innovation and Design Competition 2015 at Aman Sari Resort, Seri Alam. SJKT Kangkar Pulai won gold medal and SJKT Jalan Yahya Awal won two silver medals and one bronze medal in this competition. Teams for previous NSFYC have won gold medals in Beijing, Korea, London, New York and Hong Kong.

This year, funds were limited but the organizers successfully conducted simpler science fair within the budget available. Based on surveys conducted among our main stakeholders especially teachers and students, show that SFYC has been very successful in motivating the interest in science in tamil schools. A detail R & D Report will be launched very soon detailing this study. We hope more people would come forward to fund the programme so that the journey continues for both the young children and the science fair team.

> To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science.
>
> - Albert Einstein

1 INTRODUCTION

1.1 SUMMARY

Originally science was knowledge in general, or any branch of knowledge, including the arts. The word is from Latin scire (to know). According Oxford Dictionary, Science means 'The intellectual and practical activity encompassing the systematic study of the structure and behaviour of the physical and natural world through observation and experiment'. Meanwhile, experiment means 'A scientific procedure undertaken to make a discovery, test a hypothesis or demonstrate a known fact.

Frederic Joliot-Curie, a French physicist and physical chemist who collaborated with his wife in Nobel prize-winning research on nuclear transmutation of atoms has said the experiment should be set up to open as many windows as possible on the unforeseen. Science walks forward on two feet, namely theory and experiment... but continuous progress is only made by the use of both, as said by Robert Andrews Millikan, an American physicist whose famous oil-drop experiment determined the charge on the electron, which also showed the electron was a fundamental, discrete particle.

The best way to learn science is by the 'hands-on' manner of conducting experiments and drawing an inference from it rather than just reading, understanding and remembering its contents. Science students who are young should be encouraged to learn science by doing projects that will bring to 'life' underlying scientific concepts. With this, they can understand the concept clearly and adopt the concept in their daily life.

Because of the importance of this, a group of community based non-profit organisation has come up with Science Fair for Young Children, or SFYC in 2007. Since then, SFYC has been organised jointly with Tamil schools annually with more and more students participating every year at the school, zone and national levels.

SFYC organising team does not just organise the Fair at Zone and National Levels, the team also encourages the schools to hold School Level Science Fairs (SLSF). The organisers think that School Level Science Fairs and Zone Level Science Fairs (ZLSF) have a better impact and benefit to the students who are interested in science. Each school was given prizes to organise their own SLSF and training was provided on how to organise these fairs.

This year, 327 of schools have organised School Level Science Fair at their respective schools. At the Zone Level Science Fair, 221 schools have participated nationwide. Meanwhile, the National Level event was held on 3rd October 2015 at Manipal International University, Nilai with 60 schools taking part in it. The total expenses for organising the School, Zone and National Science amounted to RM 227,479.28 in cash and 40,500 books, 500 T-shirts and venue given at no cost by vendors.

1.2 BACKGROUND

Science is the systematic study of nature and there is much knowledge to be gained and while scientific facts are important, if the methods employed to discover or learn them are incomplete it could, hamper scientific progress and understanding.

We use our five senses to see, taste, smell, feel and hear, and explore the world around us. As Edwin Hubble, the American astronomer who first demonstrated the existence of galaxies outside the Milky Way once said, "equipped" with his five senses, man explores the universe around him and calls the adventure Science". Our senses are the gateway keys to the world of science.

Students learn science with great interest when it is more 'hands-on' or experimental, whereby they are led on a path of discovering scientific truths as they seek to satisfy their curiosity.

Science Fairs are ideal as they give students an opportunity to learn a scientific concept in greater depth, while simultaneously allowing them to:

- Use scientific methods to develop an understanding of scientific skills;
- Take an open and creative approach to problem solving;
- To create/increase awareness, interest, motivation in the study of Science in School;
- Sharpen their writing skills and their ability to work in a team, to plan and execute tasks;
- Develop their soft skills such as public speaking, when they present projects to schoolmates and judges;
- Improvement of their own learning process in critical thinking based on experience and project;
- Compete and be recognised for academic achievement -- the judging process also provides students with the invaluable experience of developing poise and thinking on their feet.

In 2003, a team was set up to organise the Young Scientific Explorers, and a group of volunteers visited schools to demonstrate simple yet exciting projects to students followed by a trip to the National Science Centre. Upon its success, and recognising the benefits of a science fair, we initiated the SFYC in 2006.

A team of scientists and educationists was formed and tasked with developing the concept, materials and the supporting structure to implement pilot projects. The following year, the first SFYC was held at the Dewan Tunku Canselor, University Malaya and it was a big success with 49 teams from Selangor and Wilayah Persekutuan taking part. The enthusiasm shown by the participating students was simply electrifying!

The SFYC was then expanded nationwide in 2008 with 197 teams from eight states participating. The final event was held at the National Science Centre, and was graced by the Chief Secretary of the Education Ministry, Tan Sri Dr. Zulkurnain bin Haji Awang.

In 2009, a total 207 teams participated in the State Level Science Fairs and the 60 best teams were selected for the national event which was staged at the Kelab Kilat (TNB Hall), in Kuala Lumpur.

The following year, 285 teams successfully took part in the State Level events in 9 states nationwide and the national event was held at the AIMST University with the participation of the 60 best teams. The state level science fair 2011 and 2012 was staged in 9 states nationwide with 274 and 269 schools taking part respectively. In 2013, 282 schools participated in the state level science fair in 9 states. The national event of 2011, 2012 and 2013 was held at the German-Malaysian Institute (GMI) with 60 top teams taking part.

In 2014, a total of 261 schools successfully participated in the state level science fair in 9 zones. The national event of 2014 was held at Dewan Raja Muda Musa, Shah Alam as a one day event. Meanwhile in 2015, 221 schools participated in the state level science fair held in 9 zones nationwide. And the national event for 2015 was held at Manipal International University, Nilai with 60 schools participating in the one day event.

1.3 OBJECTIVES OF SFYC 2015

SFYC 2015 had the following objectives:

1. To review and improve the resource materials—the 'SFYC Folder'—provided to students, teachers and co-ordinators of SFYC; to add new science projects to the sample projects already available.
2. To train science teachers from schools on 'hands-on' science, science project and encourage them to organise school level science fairs.
3. To encourage more schools to organise schools level Science Fairs.
4. To encourage students training for each zone.
5. To promote parents training to each zone to help the students and schools to organise the science fairs.
6. To empower co-ordinators to organise the zone level science fairs.
7. To organise a national level science fair for the best 60 science projects.
8. To encourage the students to participate in National and International Science Competition/ Exhibitions/Fairs.

1.4 METHODOLOGY

The non-profit organisations involved in the SFYC have been jointly organising the event successfully since 2007. We have also diligently recorded the challenges faced along the way, and have developed handbooks or guidebooks for all the stakeholders. This knowledge-base is contained in the SFYC Folder.

The folder is a key tool for the organisers, teachers, students, parents, facilitators and judges. It helps all parties to better understand the scope and nature of the project and the role of each stakeholder. There are 10 areas covered by the folder. Details of which is explained in chapter 4.

As the SFYC is a partnership project, we confer with all the various partners to enquire about their interest in joining the programme, and their ability to contribute towards the SFYC's success. After the NGO partners have been brought on-board, the SFYC Advisory Council, which sets the policy and makes the key decisions with regards to SFYC, is formed. The Working Group Committee will implement programmes towards SFYC's achievement. The representatives of partner NGOs are members of the Working Group. (Refer Appendix 3 for the Organisational Chart.)

Next, the project recruits co-ordinators and organisations to stage the state level science fairs. In 2015, we organised fairs in 9 states -- Kedah, Pulau Pinang, Perak, Selangor, Kuala Lumpur, Pahang, Negeri Sembilan, Melaka, and Johor. The co-ordinators were tasked with approaching the schools, recruiting facilitators, organising teacher trainings and sending facilitators to schools to guide the students and teachers. The staff at the SFYC headquarters assisted the co-ordinators with secretariat funtions.

For organising the state level fairs, the coordinators are given RM350 per school as seed money for every school that confirms their participation.

All participating teams are judged by a team of judges with a strong science background and they must follow the judge's manual to accurately evaluate a project's merit. The best 60 schools from the states are selected and invited to participate at the National Science Fair for Young Children.

MILESTONES FOR SFYC 2015

Item	Time Frame
SFYC 2015 Workshop	Dec. 2014
Identify Partner NGO and State Coordinators	Dec. 2014 - Jan. 2015
Form SFYC Working Group Committee	Jan. 2015
Develop Detailed Implementation Plan for SFYC 2015	Jan. 2015
Train the Coordinators on conducting School & Zone Level Science Fairs	Feb. 2015
School & Zone Level Resources, Materials & Experiment Review & Finalization	Dec 2014. - Jan. 2015
School & Zone Level Training & Workshop for Teachers	Feb. 2015 - Mar. 2015
Zone Level Science Fairs (9 Zones)	Apr. 2015 - Jun. 2015
National Level Science Fair (Manipal International University)	Oct. 2015
Post-mortem of SFYC 2015	Nov. 2015
SFYC 2015 Final Report Preparation	Nov. 2015

Table 1.1: Milestones of SFYC 2015 (November 2014 - October 2015)

1.5 ZONE CATEGORISATION

Figure 1.1: Zone Categorisation of SFYC

ZONE	STATES	TOTAL TAMIL SCHOOLS
Zone 1	Kedah & Perlis	59 Schools
Zone 2	Pulau Pinang	28 Schools
Zone 3	Perak	134 Schools
Zone 4	Selangor	97 Schools
Zone 5	Wilayah Persekutuan, Kuala Lumpur	15 Schools
Zone 6	Negeri Sembilan	61 Schools
Zone 7	Melaka	21 Schools
Zone 8	Johor	71 Schools
Zone 9	Pahang & Kelantan	38 Schools
	TOTAL	**524 Schools**

Table 1.2: Number of Tamil Primary Schools in Malaysia


STYA
COPPER

1.6 ORGANISATIONS INVOLVED

2015's Science Fair for Young Children is a group effort by:

Funding partners:

Media partner:

The organisation structure is as follows:

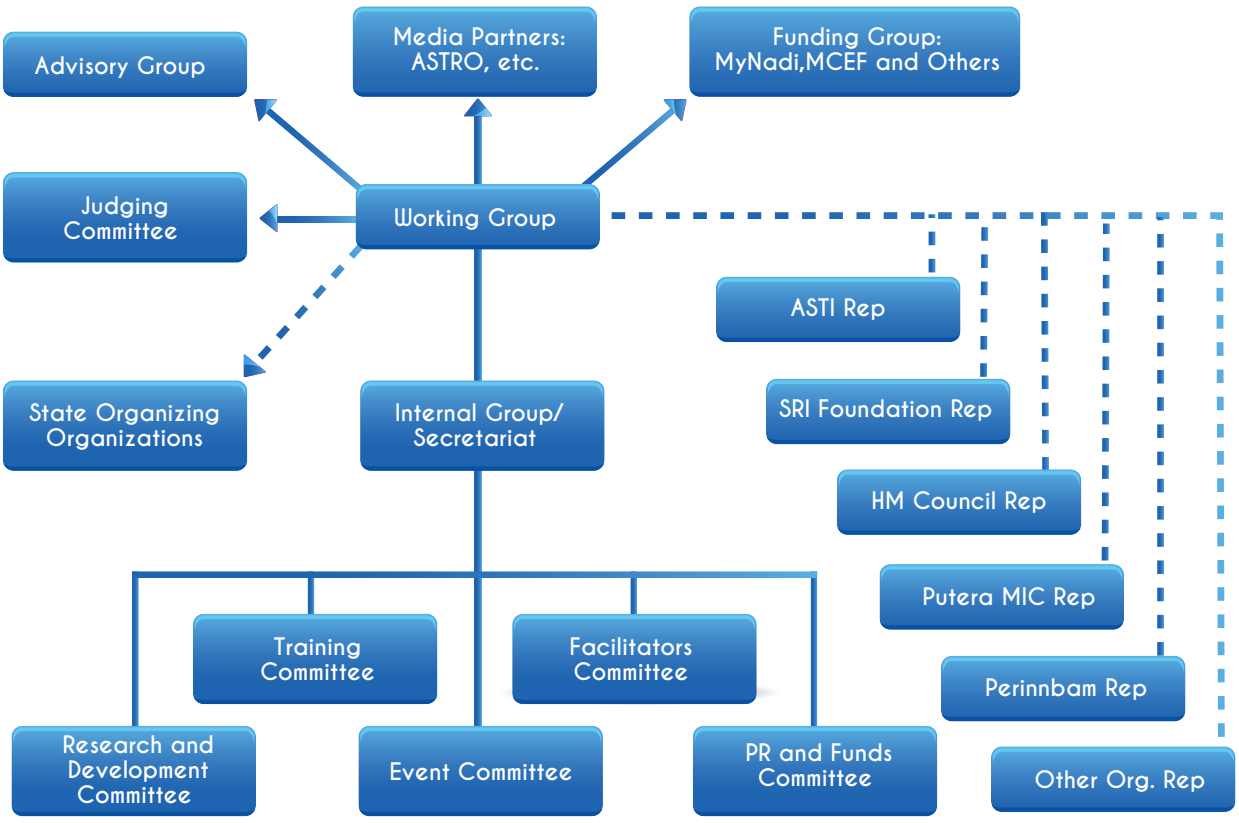


Figure 1.2: The Organisation Structure of the Science Fair for Young Children 2015

GROUPS	MEMBERS	JOB FUNCTION
Advisory Council	Advisors: Dr. Mohd Yunus Mohd Yasin Dr. Subramaniam Gurusamy Mr. Nadarajah Kalimuthu Mr. Elanjelian Venugopal Maj. Dr. Vikneswaran Munikanan	• Decision Making of policy level • Meet Twice a Year • Take over the SFYC after the Working Group Committee Dissolves
Working Group Committee (WGC)	Partner organizations representatives, Project Advisor(s), and Project Director, who will be the chairman.	• Policy making for SFYC Event • Decision making of operational level • Financial approval • Delegate and monitor the project • Guide the Internal Group • Meet every fortnight
Internal Group	Project Director, and SFYC Project Officers	• Plan and implement SFYC 2016 • Prepare weekly progress reports by each department for the Working Group's consideration • Meet every week • Provide all administrative support for the SFYC. • Organize Working Group and Internal Group meetings, prepare minutes and reports • Co-ordinate with the Facilitators and Judging Groups, and provide assistance as needed • Provide information on the progress to the relevant groups • Report to the Project Director • Core coordinator in the implementation of the projects
Judges Committee	Volunteers selected to serve in the National SFYC	• Review the judging manual and upgrade the judging instruments • Work with state coordinators to identify suitable judges for the state level science fairs • Meet state level judges as needed, provide training and guidance
Schools Level Science Fair Committee	Volunteers Chaired By the Project Advisor	• Provide materials for the running of the school level science Fair. • Conduct road shows and training in the respective states. • Work with the State coordinators to make the programme a success.

GROUPS	MEMBERS	JOB FUNCTION
State SFYC Organizers	State Level Partner organizations and Coordinators	• The State committees will be given a free hand to run their own science fair within the broad guidelines set by the Working Group. Seed funding will be given to the state committee, provided the Key Performance Indicators (KPI) are met. • The State committees that fail to meet the KPI will not be provided with any funds, and the fair may not be held in the said state. The seed funding, as per the proposal, will be returned to the donors. • The State committees are required to recruit sufficient volunteers to serve as facilitators and organising team members. • The State committees are encouraged to seek their own means of funding to cover the expenses incurred, based on their plan. • The respective schools may request to change the zones if there are good reasons (e.g. distance to the State Committee's HQ). The acceptance of their request is at the full discretion of the Working Group.
Facilitators Group Implementation Committees	Teachers and Volunteers (University students)	• Help out in organizing zone level and national level fair

Table 1.3: Responsibilities of Each Group

1.7 ACHIEVEMENTS OF THE PROJECT

Below is the progress of Science Fair since 2007.

YEAR	ZONES	NO. OF SCHOOLS PARTICIPATED	NO. OF TEAMS PARTICIPATED	NO. OF STUDENTS PARTICIPATED
2007	Selangor and Wilayah Persekutuan Only	44 Schools	49 Schools	49 x 5 Students=245
2008	National Level (6 Zones)	180 Schools	197 Schools	197 x 5 Students =985
2009	National Level (6 Zones)	188 Schools	207 Schools	207 x 5 Students =1,035
2010	National Level (9 Zones)	263 Schools	285 Schools	285 x 5 Students =1,425
2011	National Level (9 Zones)	274 Schools	274 Schools	274 x 5 Students =1,370
2012	National Level (9 Zones)	269 Schools	269 Schools	269 x 5 Students =1,345
2013	National Level (9 Zones)	282 Schools	282 Schools	282 x 5 Students =1,410
2014	National Level (9 Zones)	261 Schools	261 Schools	261 x 5 Students =1,305
2015	National Level (9 Zones)	221 Schools	221 Schools	221 x 5 Students =1,105

Table 1.4: Progress of Science Fair since 2007

In 2015, the Zone Level Science Fair was held in 9 zones. A total of 221 Tamil schools participated in Zone Level Science Fair. From the 221 schools, 60 schools were shortlisted to participate in National Level Science Fair 2015 that was held at Manipal International University, Nilai on 3rd October 2015 (Saturday).

It was noted that the students who qualified from the Zone Level Science Fairs had improved their presentation and public communication skills during their presentation at the National Level Science Fair. The students brought Science to life through their hands-on experiments as they tackled investigative questions which helped them develop and demonstrate their interest and knowledge in science enquring. They were able to explain their findings to the judges and members of public confidently.

The Tamils school students who participated in SFYC have shown improvements in the thinking process and noticeably in many areas among them are:

- Students approached problems using scientific methods.
- Students asked questions, formed hypotheses and created experiments to test their hypotheses.
- Students were able to collect data from their experiments and present them in an easy-to-understand manner.
- Students studied recorded data and drew conclusions from it.
- Students communicated their scientific research articulately and confidently to others.
- Students worked co-operatively as a team.
- Students budgeted their time, organised their work into manageable chunks, kept to a schedule and delegated work diligently.
- Students developed their reading, writing, research and computer skills.
- Students were able to answer questions from different perspectives.
- Students were confident during the presentations.

SOME OF THE ACHIEVEMENTS OF SFYC

SJKT Ramakrishna won 6 international awards and gold medal among 40 teams at Hong Kong International Innovation Competition held in November 2015. They were the only school that won 6 international awards. The awards won by them are:

i. Hong Kong Special Awards by Hong Kong International Students Innovative Invention Contest (2015-2016)
ii. Highest Standard of Excellence Award by INNOPA Special Award, Indonesia
iii. Leading Innovation Award by Macao Innovation and Invention Association
iv. Star Award for the Best International Invention by Yayasan Pendidikan and Pengajaran Indonesia, YPPI Indonesia
v. Honour of Invention Award by World Invention Intellectual Property Association, WIIPA
vi. Gold Medal for Hong Kong International Students Innovative Invention Contest (2015 – 2016)

- Three teams from SJKT Jalan Yahya Awal, one from SJKT Taman Tun Aminah, one from SJKT Kulai Besar and one from SJKT Kangkar Pulai participated in the International Invention, Innovation and Design Competition 2015 at Aman Sari Resort, Seri Alam. SJKT Kangkar Pulai won gold and SJKT Jalan Yahya Awal won two silver and one bronze medal in this competition.

- SJKT Sungai Ular participated in Penang International Innovation Competition and won Bronze Medal.

- Five teams from SJKT Jalan Yahya Awal, One team from SJKT Ramakrishna and one team from SJKT Sungai Ara took part in Kuala Lumpur Engineering Science Fair from 30 Oct - 1st Nov. SJKT Jalan Yahya Awal won bronze in student's category for their innovation, High Precision Calorimeter. About 200 teams participated in this fair.

- ITEX 2015
  - SJKT Yahya Awal won two Bronze Medals for Malaysia Young Inventors Exhibition and Asian Young Inventors Exhibition.
  - SJKT Ramakrishna won two Gold Medals for Malaysia Young Inventors Exhibition and Asian Young Inventors Exhibition and they also received Best Invention Award for Primary School.

- SJK(T) Kulim's R. Prevena (11), V. Sushmeetha (11) supported by former student R. Rasyikash (13), came up with the idea of the energy – saving machine for their school's science fair in June. According to Rasyikash, their winning in the science fair and a state-level competition encouraged them to participate in BIS.

- Three young aspiring inventors who created an energy-saving machine dispensing drinks won the Double Gold Award at the British Invention Show (BIS) 2014 in London.

- Nine pupils from SJK (T) Yahya Awal received a grand welcome from their schoolmates after clinching three gold awards at an international invention competition held in South Korea. The students also created history as it is the first time that a school from Malaysia has clinched the awards at the World Invention Innovation Contest (WIC) 2015 held on June 5 and June 6 in Seoul.

- SJKT Ramakrishna students won First prize for excellent youth science creation program in Beijing, China. They participated in National Science Fair for Young Children (NSFYC) and they were the Champion for Innovation Category in 2013 and 2014.

- Interview of SJKT Yahya Awal and SJKT Ramakrishna on THR Raaga.

- A special publication about the Winning Team of NSFY 2014 by Arivan.
- A special invitation to the Champion of NSFY 2014 to showcase their experiment to Prime Minister Dato' Sri Najib Tun Razak during the MyNadi Foundation's 5th year anniversary celebration.

- 92% increase in UPSR Science Results in Kedah mentioned by PST Kedah, Mr. Ramakrishnan Tharumaini, during ZLSF 2013.

- Encouraging Ms. Gomathy, teacher from SJKT Kangkar Pulai, to further her studies, Master/PhD in science field.

- A special invitation to SJKT Kangkar Pulai to showcase the experiment during the UNITEN's annual event.

- Science Fair of Young Children in Year Four (4) Bahasa Malaysia Text Book & Year Three (3) Bahasa Tamil Text Book.

Competition : Johor Biotech Innovation
Title : Participation Award
School : SJK(T) Kangkar Pulai

Competition : International Science Olympiad Exam
Title : Bronze Medal & Merit Award
School : SJK(T) Kangkar Pulai

Competition : British Invention Show (BIS) 2014, London
Title : Double Gold Award
School : SJK(T) Kulim
Invention : Energy-Saving Machine Dispensing Drinks

Competition : International Convention and Innovation (UTM)
Title : Bronze Medal & Silver Medal
School : SJKT Kangkar Pulai
Invention : Bio-Organic Fertiliser Robotic Football Player

Competition : Science Innovative Camp, USM Penang
Title : Champion Award (Primary School Category, State Level)
School : SJKT Ramakrishna
Invention : Noise Reducer

Competition : E-scosa Competition, USM Penang
Title : Best Post Award (Secondary School Category, State Level)
School : SJKT Ramakrishna
Invention : Eco-friendly Thermo Container

Competition : Science Innovative Camp, USM Penang
Title : Champion Award (Secondary School Category, State Level)
School : SJKT Ramakrishna
Invention : Noise Reducer

Competition : International Invention, Innovation and Design, UITM Johor
Title : Silver Medal
School : SJKT Kangkar Pulai

Invention : Bio-Organic Fertilizer
Competition : Malaysia Young Inventors Competition (MYIC)
Title : Champion Award (Primary Level)
School : SJKT Ramakrishna
Invention : Eco-friendly Thermo Container

Competition : Malaysia Young Inventors Exhibition (MYIE)
Title : Gold Medal
School : SJKT Ramakrishna
Invention : Eco-friendly Thermo Container

Competition : Asian Young Inventors Exhibition (AYIE)
Title : Silver Medal
School : SJKT Jalan Yahya Awal
Invention : Twin Aquest Bottle

Competition : Asian Young Inventors Exhibition (AYIE)
Title : Gold Medal
School : SJKT Ramakrishna
Invention : Eco-friendly Thermo Container

Competition : Pertanding Inovatif Zon Timur, Kementerian Sains, Teknologi & Inovatif (MOSTI)
Title : Overall Category Winner
School : SJKT Mentakab
Invention : Missiles Launcher (New's Third Law)

Competition : Malaysia Young Inventors Competition (MYIC)
Title : Gold Medal
School : SJKT Jalan Yahya Awal
Invention : Twin Aquest Bottle

Competition : Pertandingan Inovasi Sempena Hari Guru Peringkat Negeri
Title : Silver Medal
School : SJKT Kangkar Pulai
Invention : invents Water Recylce

Competition : Invention, Innovation & Design, Johor
Title : Gold Medal
School : SJKT Kangkar Pulai
Students' Names: Jegathiswary, Satish & Samoga
Invention : Invents Water Recycle

Competition : Genius Olympiad 2012 International High School Project Fair on Environment, New York.
Title : Bronze Medal
Students' Names: Ramamurthi & Sri Arivesh
Former-School : SJKT Kulim
Invention : Neighbours Wonder, an alarm system

2 SCHOOL LEVEL SCIENCE FAIR

2.1 INTRODUCTION

There are three reasons why science is important for our children:

1. *Children love science because it engages their curiosity.*
2. *Science provides practical tools for understanding everyday life.*
3. *Science advances critical thinking, problem solving and creativity in early learners.*

The School Level Science Fair (SLSF) was initially introduced in Tamil schools back in 2009 as a pilot project in Johor or Zone 8. The project was conducted in all 70 Tamil Schools in Johor and it was a great success.

With the pilot project results, the SFYC advisory board concluded that School Level Science Fairs create a better impact and more students nationwide would benefit from it. Thus, the board decided that the School Level Science Fair has to be introduced in all states throughout Malaysia. As a result, the board undertook the task of conducting and implementing the fair in every zone. The fair was first implemented nationally by a special school level science fair committee chaired by the founder of the project Dr. Mohamed Yunus Yasin.

In 2010, each school was provided up to RM300 depending on their size to assist them to organise School Level Science Fairs and as a result about 98 schools staged such fairs.

By 2011, after receiving positive feedback, SLSF had increased its target participation to at least 250 schools by having national level roadshows in 9 locations across the nation. The response from the participating schools was overwhelming and beyond our expectations. A total of 264 schools successfully organised the fair in their respective schools. In 2012, we set the bar even higher by targeting 325 schools. But 365 schools successfully staged the fairs exceeding our target. Meanwhile in 2013, a total of 423 schools held their School Level Science Fair, everaging more the 1 fair per day for 2013.

For 2015, a complied CD of SLSF and ZLSF was prepared with sample proposals, forms, experiments, reports, guidebook for parents & teachers and modules.

2.2 SEED FUNDING

In 2015, every school that confirmed its participation by sending their proposal to the zone coordinators were given prizes such as medals, certificates and story books. Each school was given 90 story books, 10 medals and certificates of participation for all the students.

The schools were given time from February 2015 until October 2015 to organise School Level Science Fair. This year 327 schools out of 524 Tamil schools participated in School Level Science Fairs.

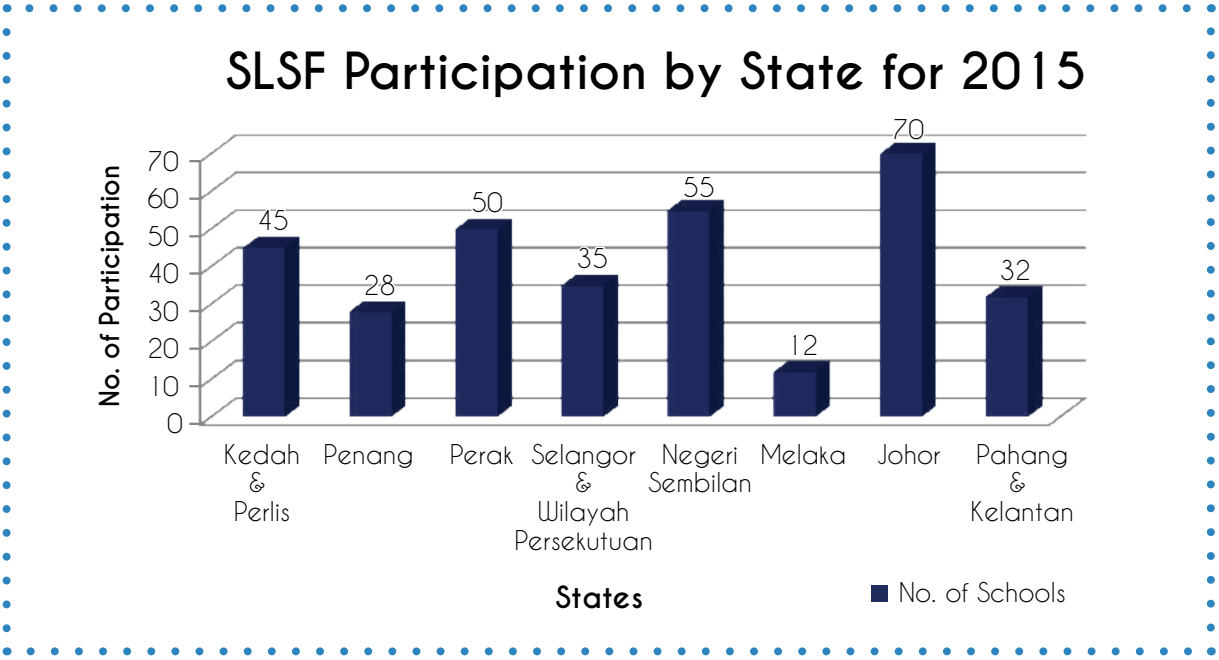
2.3 IMPLEMENTATION OF SCHOOL LEVEL SCIENCE FAIR 2015

The School Level Science Fair for Young Children 2015 started in February 2015. Just like in year 2014, the organising committee has decided to combine the School Level & Zone Level Science Fair Teachers Training. An official invitation letter inviting teachers and headmasters/headmistress to participate in School Level & Zone Level Science Fair Teacher's Trainings was sent by each zone coordinator.

The participation of schools in School Level Science Fairs has been increasing year by year. The details of their participation in the past years are shown in the table below.

ZONE	STATE	TOTAL SCHOOLS					
		2010	2011	2012	2013	2014	2015
1	Kedah & Perlis	-	46	43	56	32	45
2	Pulau Pinang	-	-	14	20	26	28
3	Perak	-	45	73	93	80	50
4 & 5	Selangor & Wilayah Persekutuan	11	36	59	87	50	35
6	Negeri Sembilan	-	20	46	42	40	55
7	Melaka	-	21	21	21	17	12
8	Johor	70	70	70	72	68	70
9	Pahang	1	18	12	32	25	32
	TOTAL	82	256	338	423	338	327

Table 2.1: Schools Participation in SLSF from 2010 till 2015



3 ZONE LEVEL SCIENCE FAIR 2015

3.1 INTRODUCTION

Over the years, the participation of schools in the Zone Level Science Fair has been on the rise. The organisers initially divided the nation into 6 zones. In 2010, due to experience gained by the organisers on how to run the Zone Level Science Fair and the need to give more schools the opportunity to participate in the fair, the organising committee predesignated the zones and increased the number of zones to Nine. We have maintained these zoning criteria since then and it has proven to be optimal by organisers and acceptable to schools.

In order to accommodate the increased number of schools participating, another change was made to the Zone Level Science Fair in 2011. The number of teams each school was allowed to participate was changed. Up to 2 teams from each school were allowed in the past. After the change was made, only 1 team from a school was allowed. This change however did not cause a drastic reduction in the number of teams participating because the number of schools that took part had increased. In fact, 2013 saw a total of 282 teams, and 261 teams in 2014, participating nationwide.

ZONE	2008 AND 2009	2010 - 2015
1	Kedah, Pulau Pinang & Perlis	Kedah and Perlis
2	Perak	Pulau Pinang
3	Selangor & Kuala Lumpur	Perak
4	Melaka and Negeri Sembilan	Selangor
5	Johor	Kuala Lumpur, Wilayah Persekutuan
6	Pahang & Kelantan	Negeri Sembilan
7	-	Melaka
8	-	Johor
9	-	Pahang and Kelantan

Table 3.1: Comparison of Zone Categories

ZONE	STATE	TOTAL SCHOOLS	
		2008	2009
1	Kedah, Pulau Pinang & Perlis	28	28
2	Perak	18	15
3	Selangor & W.P Kuala Lumpur	58	74
4	Melaka & Negeri Sembilan	4	3
5	Johor	57	54
6	Pahang & Kelantan	15	14
	TOTAL	180	188

Table 3.2: Participation of Schools in Zone Level Science Fair in 2008 and 2009

ZONE	STATE	TOTAL SCHOOLS				
		2010	2011	2012	2013	2014
1	Kedah & Perlis	17	41	34	52	49
2	Pulau Pinang	16	16	19	14	18
3	Perak	50	47	53	56	48
4	Selangor	54	56	35	43	9
5	Wilayah Persekutuan, Kuala Lumpur	14	13	10	10	19
6	Negeri Sembilan	18	18	30	30	34
7	Melaka	21	21	21	21	10
8	Johor	59	45	52	37	49
9	Pahang & Kelantan	14	17	15	19	25
	TOTAL	263	274	269	282	261

Table 3.3: Participation of Schools in the Zone Level Science Fair in 2010, 2011, 2012, 2013 and 2014

The Zone Level Science Fairs were held in May, June and July 2015. The shortlisted schools for the National Level Science Fair were given sufficient time to improvise their experiment. The details of the Zone Level Science Fairs are shown in the table below.

ZONE	STATES	DATES	VENUES
1	Kedah & Perlis	27th June 2015, Saturday	SJKT Paya Besar
2	Pulau Pinang	9th May 2015, Saturday	USM
3	Perak	11th July 2015, Saturday	Mariamman Temple Hall
4	Selangor	11th July 2015, Saturday	Stadium Badminton Cheras
5	W.P Kuala Lumpur	11th July 2015, Saturday	Stadium Badminton Cheras
6	Negeri Sembilan	4th July 2015, Saturday	Nilai Commercial Centre
7	Melaka	25th July 2015, Saturday	SJKT Alor Gajah
8	Johor	16th May 2015, Saturday	Politeknik Mersing
9	Pahang & Kelantan	5th July 2015, Sunday	SJKC Hwalian

Table 3.4: Zone Level Science Fair 2015 Dates and Venue

ZONE	STATE	TOTAL SCHOOLS
1	Kedah & Perlis	38
2	Pulau Pinang	20
3	Perak	38
4	Selangor	25
5	Kuala Lumpur, Wilayah Persekutuan	9
6	Negeri Sembilan	22
7	Melaka	4
8	Johor	45
9	Pahang & Kelantan	20
	TOTAL	221

Table 3.5: Schools Participation in the Zone Level Science Fair 2015

4 TRAINING AND DEVELOPMENT

4.1 TRAINING PREPARATION AND PROGRESS

4.1.1 SCIENCE FAIR FOLDER

The Science Fair folder is a key tool for the organisers, teachers, students, parents, facilitators and judges to implement the project effectively and efficiently. This folder was prepared for the first time in 2008 by the Working Group Committee (WGC) members and a group of professionals. The following year, the folder was revised, reviewed and translated into English and Tamil by the Working Group Committee (WGC) and Secretariat based on comments from teachers, students, organisers and judges. In 2014, the folder was revised, where new partially guided experiments were added and distributed in the form of VCDs to all the participating schools during the Zone Level Teachers Training. Some of the new schools were also given the hardcopy folder / file. The content of the folder is as follows:

i. **How to use this folder:** Explains how the folder should be used by each group/stakeholder.
ii. **Science Projects, Scientific Methods and Science Fair:** Simple explanation about what a science project is, scientific method and science fair.
iii. **Organisers Manual:** Basically gives an explanation on how to organise a science fair. Examples on holding it in schools, classrooms, organisations, *etc.*
iv. **Teachers Manual:** Explains the roles and responsibilities of the Science Teachers to guide the participants of the fair.
v. **Students Manual:** Helps the students to develop their project and provides the format for writing a report.
vi. **Parents Manual:** Guides the participant's parents on how to help motivate their child to perform well in SFYC.
vii. **Facilitators Manual:** Gives a guideline to the facilitators on how to facilitate so that they can help teachers and students during school visits.
viii. **Judges Manual:** Gives proper guidelines on how to judge a science project effectively. This manual has been improved considerably after 2013's feedback on the judging criteria.
ix. **Research Paper:** Guidelines for research paper preparation of the top 2 teams in each zone.
x. **Partially Guided Experiments:** There were 20 partially guided experiments given in English and Tamil to be chosen by the schools.

We hope that the manual would be helpful for the future members to organise science fairs at school, zone or national levels. The manual was upgraded from time to time to improve the quality and output of the Science Fair for Young Children.

4.1.2 VCD PRODUCTION

Previously, all the materials in the SFYC folder were given out to schools in hardcopy format, but the content of the folder was made into VCDs and were given to all the participating schools during the Teachers Training for the last five years. However, since the School Level & Zone Level Teachers Trainings had been combined since last year, the content of the VCD had also been combined and upgraded with new information to help schools prepare for the School Level, Zone Level and National Level Fairs. The content of the VCD is shown below:

School Level Science Fair

i. SLSF 2015 Booklet
ii. Proposal Format
iii. Report Format
iv. Judging Form
v. Evaluation Form of Scrapbook
vi. Additional Activities for Students and Visitors
vii. Additional Materials such as picture gallery, motivational recordings & SLSF Checklist
viii. Experiment for Students (Standard 1 - 5)
ix. Parents' Guide
x. Teachers' Guide

Zone Level Science Fair

i. Science Fair Folder Content (PDF Copy)
ii. ZLSF Experiment titles (Doc & PDF Copy)
iii. Sample Research Paper of NSFYC 2014 (PDF Copy)
iv. Booth Set-Up and Preparation of NSFYC 2014(Video)
v. Photo Gallery of NSFYC 2014

4.1.3 TRAINING FOR TRAINERS

Training for Trainers was conducted by Dr. Subramaniam Gurusamy who is the advisor of Science Fair for Young Children. Before the training team conducted the Zone Level Science Fairs teachers training, they were briefed by Dr.Subramaniam on the agenda and information to be delivered to the teachers. Below was the agenda of the training for trainers and teachers:

TIME	DETAILS
8.30 am - 9.00 am	Arrival and Registration
9.00 am - 9.05 am	Welcoming Speech by Organizer
9.05 am - 9.10 am	Speech by MGB Chairman
9.10 am - 9.20 am	Opening Ceremony and Speech By Guest of Honour, Penyelia Sekolah Tamil
9.20 am - 9.45 am	Introduction of SFYC by Organizer
9.45 am - 10.30 am	SLSF 2015 Introduction and Overview Presentation 1 • *Introduction of Partner Organizations* • *How to Organize School Level Science Fair?* • *Experiment & CD Content*
10.30 am - 11.00 am	Tea Break
11.00 am - 12.00 pm	Hands-on Experiment
12.00 pm - 12.15 pm	Judging Methodology and Requirements Presentation 2 • *Judging Procedure*
12.15 pm - 1.15 pm	ZLSF 2015 Experiment and CD Content Presentation 3 • *CD Content* • *Experiments*
1.15 pm - 1.30 pm	Evaluation of School Level Science Fair
1.30 pm	Certificate Presentation & Lunch.

Table 4.1: SLSF & ZLSF Teachers Training Agenda

4.2 SCHOOL LEVEL AND ZONE LEVEL TEACHERS TRAINING

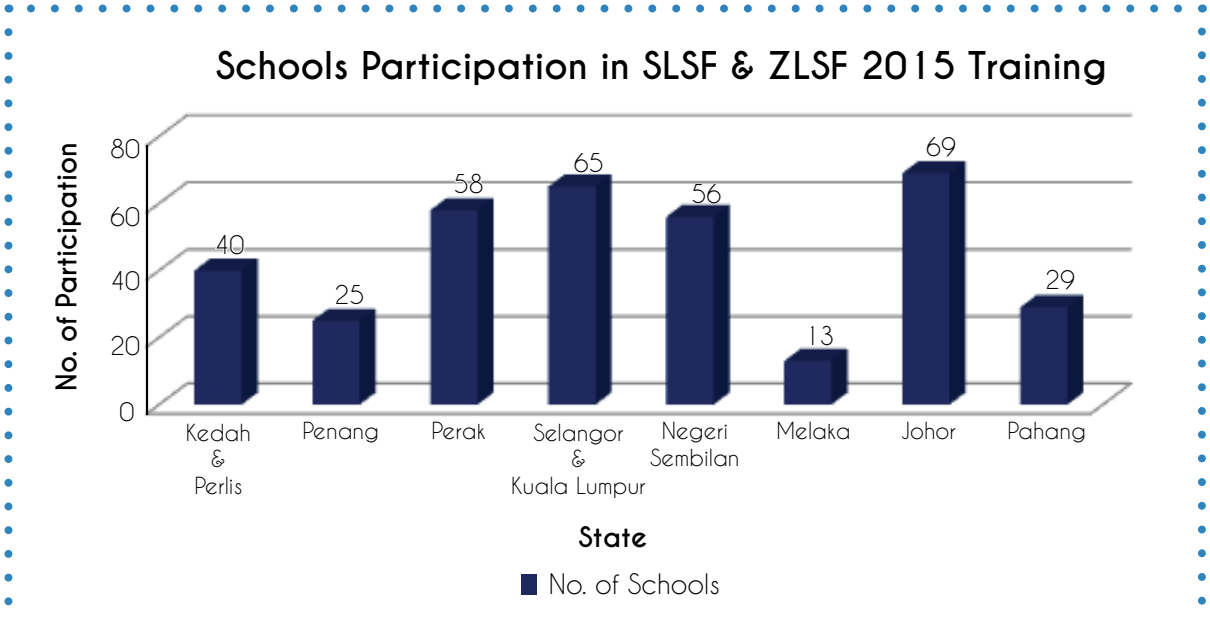
Just as last year, this year's School Level & Zone Level Science Fair Teachers Trainings were combined and conducted as a half-day session. The training was conducted in 9 zones on different dates. The session was facilitated by the Organizing Committee together with the facilitators.

The training sessions were arranged by the respective zone coordinators and conducted by the trainers from the Working Group Committee.

The training sessions and materials were prepared and planned by the trainers from the Working Group Committee and the training dates were given by the respective zone coordinators in advance so that the training teams could make prior arrangements. Below are the details of all the School Level and Zone Level training sessions that were conducted.

ZONE	STATE	TRAINING DATES	TRAINING VENUE	SCHOOLS PARTICIPATION
1	Kedah	28 February 2015	SJKT Sungai Tok Pawang	40
2	Penang	14 February 2015	USM, Dewan Pembangunan Siswa 1, Kompleks Cahaya	25
3	Perak	7 March 2015	SJKT Kampung Simee	58
4 & 5	KL & Selangor	28 February 2015	SJKT Batu Caves	65
6	Melaka	7 March 2015	SJKT Convent	56
7	Negeri Sembilan	28 February 2015	Krishna Balaram Indian Arts and Cultural Society Hall, Ayer Keroh	13
8	Johor	28 February 2015	Landmark Hotel, JB	69
9	Pahang	14 February 2015	SJKT Mentakab	29
			TOTAL	**355**

Table 4.2: Participation of the Schools in the SLSF & ZLSF Teachers Training



5 NATIONAL SCIENCE FAIR FOR YOUNG CHILDREN 2015

5.1 OVERVIEW

The National Science Fair for Young Children 2015 was held as a one (1) day event which started on Saturday morning at 7.30am and ended at 4.30pm. The event was a great success. The details of the event are as follows:

Date : 3rd October 2015, Saturday
Venue for Science Fair Event : Manipal International University, Nilai, Negeri Sembilan.

A special team was formed to organise the one (1) day National Science Fair for Young Children 2015 a month prior to the event by the Working Group Committee. The event committee was led by Ms. Kalaivany. A total of 14 Departments were formed and tasks were delegated to each Head of Department (HOD). The HOD list is shown in Table 5.1 below. The NSFYC was assisted by more than 53 volunteers from Manipal International University and Institut Pendidikan Guru Seremban.

NO	NAME	POSITION
1	Mr. Selventhiran	Project Director and Advisor for Event Committee
2	Ms. Kalaivany	Head of Event Committee
3	Ms. Vanitha Vasu	Head of Accommodation Department
4	Ms. Devala	Head of Registration Department
5	Mr. Ragavan Pandian	Head of Hall Management
6	Ms. Rimala	Head of Judging Department
7	Ms. Archana	Head of Stage and Prize Management
8	Mr. Jaganath & Mr. Sivaraj	Head of Crowd Management
9	Mr. Jayaseelan	Head of Food and Beverages Department
10	Ms. Anitha	Head of Press Management
11	Mr. Joseph	Head of Media Management
12	Ms. Viji	Head of Ushering Department
13	Mr. Kumaresan	Head of Survey Department
14	Mr. Nutanaya	Head of Traffic, Transportation and Security Department
15	Mr. Joseph	Head of Facilitators Management

Table 5.1: List of Heads of Departments for the National Science Fair for Young Children 2015

The various job functions making up the event were well coordinated by the volunteers and integrated well to result in a smooth, seamless, well run one (1) day event. The Head of Event Committee and the HODs executed the tasks well with the volunteers to ensure those participating in and those visiting the fair could do so easily and were provided with all the necessary assistance needed.

The events were coordinated as follows:

3rd October 2015, Saturday

The day started at 7.30am with the arrival and registration of the participants and teachers at the ASTI booth. Each school was given RM200 as allowance at the registration booth. The in-charge teachers from each school were allowed to register at the counter. Meanwhile, the students and other teachers were allowed to just place their display items at their booths. During the registration, each school received a 'goodie' bag which consisted of tags, food coupons, guidebooks, annual report, souvenir books, T-shirts and flyers. After the registration and breakfast, the students and teachers were allowed to enter the hall to set-up their booth until 9.00am.

Exactly at 9.00am, the Opening Ceremony was held at the Manipal International University Lobby and officiated by ASTI's President, Dr. Mohamed Yunus Mohamed Yasin. The launched the event by placing the challenge trophy of National Science Fair for Young Children 2015 on stage which was handed over by last year's champion SJKT Jalan Yahya Awal, Johor.

From 9.30am onwards, the judges were allowed into the hall for the evaluation. The judges took about 4 hours for the evaluation.

Meanwhile, the teachers were involved in activities such as discussion and sharing sessions with the organising team, which involved a motivational talk, an experience sharing session and dialogue with the Judging Department. Lunch was served from 12.30 pm to 1.30 pm. The participants continued with the judging evaluation. At the end of the teachers sharing session, the teachers were given certificates as a token of appreciation.

The public viewing officially started at 1.30pm and ended at 3.00pm. During the session, all the participants were presented with certificates and medals by our special guests at their respective booths. A few booths were set-up at the entrance by organisations such as Uma Publication and Dimension Bookstore.

Our guest of honours for the Closing Ceremony was Datuk Dr. Jeyaindran Tan Sri Sinnadurai, Chairman of MyNadi Foundation and Datuk Prof. Dr. NS Rajendran, Director of SEDIC & Coordinator of Action Plan for Future of Tamil Schools. Datuk Prof. Dr. NS Rajendran arrived around 2.00pm and visited the booths with our special guests, accompanied by Dr. Mohamed Yunus Muhamed Yasin - President of ASTI, Dr. Subramaniam Gurusamy – Vice President of ASTI, Major Dr. Vikneswaran Munikanan - Treasurer of ASTI, YB Raven Kumar Krishnasamy – ADUN Tenggaroh, Datuk Dr. Thillainathan, Datuk Sothinathan – Director of Uma Publications, Datin Kanagam – PRISMA, Mr. Nadarajah – Penolong Pengarah Sektor Pengurusan Sekolah JPN Johor, Mr. V. Mugilan, President of MIVA, Mr. Selventhiran - Project Director of Science Fair for Young Children 2015, Prof. (Dr) Pooti Laxmi Narayana Gangadhara Rao – Vice Chancellor, Manipal International University and Mr. Madhukumar M K – Senior Vice President & Chief Operations and many other dignitaries.

At 3.30pm, the closing ceremony began, which ended at 5.30pm. There were 3 categories of winners: Innovation Category, Research Paper Category and NSFYC Winners. All categories were judged by capable judges. The top 3 winners of the Innovation Category received certificates and cash prizes worth RM500, RM400 and RM300. The top 3 winners of the Research Paper Category also received certificates and cash prize of RM500, RM400 and RM300. All the top 10 winners of the event went back home with prizes. The Overall Champion of the event received a Challenge Trophy, trophy, certificates and prize money of RM2000. The 1st Runner up of the event received trophy, certificates and prize money of RM1500, and the 2nd Runner up received trophy, certificates and prize money RM1250. Meanwhile the 3rd and 4th Runners up received trophy, certificates and prize money of RM750 and RM500 respectively. Whereas the consolation prize winners who are 6th seeded till 10th seeded received certificates and prize money of RM250 each. The list of NSFYC 2015 winners is as follows:

NSFYC WINNERS

1. SJK (T) LADANG ALMA, PENANG
2. SJK (T) TAMAN TUN AMINAH, JOHOR
3. SJK (T) KULAI BESAR, JOHOR
4. SJK (T) NILAI, NEGERI SEMBILAN
5. SJK (T) BINJOL, KEDAH
6. SJK (T) TAMAN PERMATA, SELANGOR
7. SJK (T) WELLESLEY, KEDAH
8. SJK (T) PASIR GUDANG, JOHOR
9. SJK (T) BUKIT MERTAJAM, PENANG
10. SJK (T) BANDAR MENTAKAB, PAHANG

INNOVATION CATEGORY

1. SJK (T) LADANG ALMA, PENANG
2. SJK (T) NILAI, NEGERI SEMBILAN
3. SJK (T) DESA CEMERLANG, JOHOR

RESEARCH PAPER CATEGORY

1. SJK (T) KULAI BESAR, JOHOR
2. SJK (T) TAMAN PERMATA, SELANGOR
3. SJK (T) SCARBORO, KEDAH

MyNadi also announced lots of "goodies" for the winning team.

6 RESEARCH AND DEVELOPMENT DEPARTMENT

6.1 EXPERIMENTS

The experiments were developed by the Judging R&D Department of ASTI. A team was formed comprising professionals from various fields. They developed a list of partially guided experiments which consisted of 20 experimental titles. All the experiments were then analyzed for their relevance, cost, applicability, difficulty, material availability and safety. These experiments were then discussed and finalized by the core judges and advisors of SFYC. The finalized experiments were then sent for translation into Tamil language, and once translated were forwarded to all schools. The list of experiments is attached in Appendix C.

6.2 SURVEYS

This year the R&D Department conducted the following surveys:

I. School & Zone Level Science Fair Teachers Training
II. Zone Level Science Fair for Young Children
III. National Level Science Fair for Young Children
IV. Survey on Effectiveness of Science Fair for Young Children

The data collected from the surveys will be used to correct and upgrade our future projects. A separate R&D report will be prepared based on these surveys.


YOUNG
SCIENTIST

7 PUBLIC RELATIONS

For Science Fair for Young Children 2015, the Public Relations (PR) Department managed the flow of information between the organisers of the Science Fair and general public. Information about the Science Fair for Young Children programme was promoted to the public via press releases and interviews over national radio and television.

The flow of information between internal and external stakeholders was reached through various levels such as the School Level Science Fair, Zone Level Science Fair and the National Level Science Fair. Astro Vaanavil as our official electronic media and Thinakural as our official print media highlighted our event throughout Malaysia. The Public Relations activities carried out to promote the Science Fair for Young Children 2015 are shown below:

1) SFYC Soft Launching

- Science Fair for Young Children 2015 Soft Launching officiated by Datuk Prof. Dr. NS Rajendran, Director of SEDIC & Coordinator of Action Plan for Future of Tamil Schools on 25th March 2015 at ASTI Office, Petaling Jaya.
- The Science Fair for Young Children 2015 Soft Launching was broadcast over RTM TV2 Tamil News.
- The Science Fair for Young Children 2015 Soft Launching was published in Tamil newspapers such as Malaysia Nanban, Makkal Osai, Thinakural, Tamil Nesan and Thaimoli and National newspaper such as Berita Harian as well.

2) School Level Science Fair 2015

- Press release for School Level Teachers Training in Tamil media newspapers such as Malaysia Nanban, Thinakural, Makkal Osai and etc.
- Promotional Capsule which was sponsored by ASTRO was telecast over ASTRO Tamil Channels.
- Promotional via SFYC Facebook & Website.

3) Zone Level Science Fair 2015

- Press release for Zone Level Teachers Training and Zone Level Science Fair by zone.
- Pamphlets were distributed to the coordinators for them to promote the Fair in their respective zones.
- Interview in ASTRO Vaanavil Vizhuthugal attended by Mr. Jayashri Selvendran J Thanapal (Project Director of NSFYC 2015) and Mr. Paary Rajan.
- Interview on Vasantham, RTM2 attended by Dr Mohamed Yunus Mohamed Yasin and Mr. Jayashri Selvendran J Thanapal
- Dissemination of information via SFYC & ASTI Website.
- Dissemination of information via SFYC & ASTI Facebook.

4) National Level Science Fair 2015

- Pamphlets were sent to VIPs, Guests, Funders and all well-wishers to provide information about the NSFYC.
- NSFYC 2015 invitations were sent to VVIPs, VIPs, Guests, Public University and Private University lectures, funders and well-wishers.
- A special invitation was sent to the public to attend the NSFYC 2015.
- 10 capsules related to science were sponsored by ASTRO and was telecast over ASTRO Tamil Channels until the National Level Science Fair. The capsules' content was developed jointly by SFYC Working Group and ASTI Committee.
- A promotional capsule which was sponsored by ASTRO was telecast over ASTRO Tamil Channels since July 2015.
- Dissemination of information via SFYC & ASTI Website.
- Dissemination of information via SFYC & ASTI Facebook.

5) Post-National Level Science Fair 2015

- Five teams from SJKT Jalan Yahya Awal, one team from SJKT Ramakrishna and one team from SJKT Sungai Ara took part in Kuala Lumpur Engineering Science Fair held from 30th Oct till 1st Nov 2015. SJKT Jalan Yahya Awal won bronze in student's category for their innovation, High Precision Calorimeter. About 200 teams participated in this fair.
- SJKT Sungai Ular participated in Penang International Innovation Competition and won Bronze Medal.
- Three teams from SJKT Jalan Yahya Awal, one from SJKT Taman Tun Aminah, one from SJKT Kulai Besar and one from SJKT Kangkar Pulai participated in the International Invention, Innovation and Design Competition 2015 at Aman Sari Resort, Seri Alam. SJKT Kangkar Pulai won gold medal and SJKT Jalan Yahya Awal won two silver medals and one bronze medal in this competition.
- Documentary of Science Fair for Young Children - (*Joureny of the Science Fair for Young Children - "Ariviyal vizhavin Payanam"*)

The project also received wide coverage in newspapers such as The Malaysia Nanban, Tamil Nesan, Makkal Osai, Tamil Malar, Thinakural, Thaimoli, The News Straits Times, The STAR, Berita Harian and Bernama for the School Level and Zone Level trainings, Zone Level Science Fair and pre and post National Event.


இளம் ஆய்வாளர்களின்
தேசிய அறிவியல் விழா
National Science Fair
for Young Children 2015
SFYC
அறிவியல் விழா
Science Fair for Young Children
DATE
ACHIEVEMENT
இளம் ஆய்வாளர்களின்
அறிவியல் விழா 2015
SCIENCE FAIR FOR
YOUNG CHILDREN 2015
CHAMPION
RM 500
INNOVATION CATEGORY
இளம் ஆய்வாளர்களின்
அறிவியல் விழா 2015
SCIENCE FAIR FOR
YOUNG CHILDREN 2015
CHAMPION
RM 2000

8 FUNDING

This year, the organizing committee of SFYC 2015 had to postpone the National Level Science Fair due to lack of funding. Nevertheless, looking at the overwhelming response from the Tamil schools to hold the National Level Science Fair this year, the organizing committee had decided to organize a scaled down version of the National Level Science Fair with a smaller budget. After much deliberation, the committee had decided to hold a one (1) day National Level Science Fair instead of the usual three (3) day event. The total cost for the event was estimated to be around RM110, 000.00 to which ASTI Committee had committed.

The Science Fair for Young Children 2015, together with others, were principally supported and funded by various NGOs and corporations such as MyNadi Foundation, Malaysian Community & Education Foundation (MCEF) and PRISMA. The summary of Funding for the Science Fair for Young Children 2015 is stated below:

NO	SPONSOR	AMOUNT (RM)
1	MyNadi Foundation	100,000.00
2	MCEF	100,000.00
3	PRISMA	30,000.00
	TOTAL	230,000.00

Table 8.1: Summary of Funding for the Science Fair for Young Children 2015

Manipal International University, Nilai sponsored the venue for the event. This contribution was greatly appreciated by the Working Committee of SFYC 2015 as they helped ensure the success of the Science Fair by providing the venue and all facilities to all who attended and participated.

Several other corporations were also approached to sponsor product for the SLSF & NSFYC. Few companies this responded positively and contributed their product for the SLSF & NSFYC 2015. The list of the companies and product is as follows:

NO	SPONSOR	ITEM	QUANTITY
1	Firdaus Press Sdn Bhd (SLSF)	Story Books	40500
2	Malaysia Indian Visionary Association (MIVA)	T-Shirts	500
3	Manipal International University, Nilai	Venue	-

Table 8.2: Sponsor of Product for SLSF & NSFYC 2015

The story books were distributed to the schools during the SLSF & ZLSF teachers training and also before the event. The t-shirts were given during the NSFYC event to the students, teachers, volunteers and judges. These contributions were greatly appreciated by the WGC of SFYC 2015.

We also believe that this kind of contribution produced a win situation for both the organisers and the sponsors by providing good publicity and a direct promotion avenue for the company's products to our participants, aged between 10-12 years old, teachers, and parents as well as to the general public who visited the fair.

In return for their generosity in cash or in-kind all corporate sponsors had their company logo included in the SFYC 2015 promotional material such as the programme book.

9 JUDGING

The Judges Panel is an independent group of qualified individuals who are responsible for the evaluation of the students' research, experiments, exhibits and for compliance with the rules and regulations throughout the SFYC. The judges were selected based on their educational background, occupational background and knowledge of science. Therefore, most of the judges selected were individuals with science degrees. From this core group of judges, separate ZLSF Judges Panel and NSFYC Judges Panel were set up to judge the students' performance based on the specific categories and requirements for each event. The respective Judging Panel's decisions were final and independent from the organizing committee. Each zone level Judge was headed by a zone level Chief Judge.

9.1 ZONE LEVEL CHIEF JUDGES TRAINING

The Judges Panel was responsible for synchronizing the judging criteria and methodology in all the zones. In order to make the process more efficient, Chief Judges were selected for each zone. The Zone Chief Judges list is as stated below:

ZONE	STATE	CHIEF JUDGES
1	Kedah and Perlis	Mr. Saravana Kumar A/L Soorinarayanan
2	Penang	Dr. Jimmy Nelson Appaturi
3	Perak	Mr. Sathiakumaran Krishnan
4 & 5	Selangor and Kuala Lumpur, W.P.	Mr. Rajeswara Rao A/L Apparow
6	Negeri Sembilan	Mr. Rajeswara Rao A/L Apparow
7	Melaka	Mr. Vigneswara Rao Gannapathy
8	Johor	Mr. Suresh Ramasamy
9	Pahang and Kelantan	Mr. Prem Kumar Apasamy

Table 9.1: Zone Chief Judges

The Chief Judges meeting was held on 17th January 2015 to brainstorm the following aspects:

- Discuss the overall judging criteria and process.
- Discuss the methods and training materials required for the training of Zone Level / State Level Judges.
- Finalize criteria to select the Zone Level / State Level Judges.
- Discuss the scope for the non-guided experiments developed for the Zone Level Science Fair.
- Finalize the 20 non-guided experiments for the Zone Level Science Fair.
- Prepare training materials such as presentation slides, worksheets, handouts and illustrations.
- Conduct workshop sessions to ensure the core judging panel was well-equipped with the "experimental" and theoretical knowledge of all the experiments presented by the students.

9.2 ZONE LEVEL JUDGES TRAINING

The Chief Judges of each zone were assigned to conduct training for the judges in their team. All the Zone Chief Judges conducted the training in their respective zone one week before the actual Zone Level Science Fair. The details of the judges training are as follows:

ZONE	DATE	VENUE	TRAINER
Kedah & Perlis	Saturday, 27 June 2015	SJKT Paya Besar	Mr. Saravanan Manian
Pulau Pinang	Sunday, 26 April 2015	USM, Penang	Dr. Jimmy Nelson & Mr. Saravanan Manian
Selangor & Wilayah Persekutuan	Saturday, 11 July 2015	Stadium Badminton Cheras	Dr. Rajesh Ramasamy & Mr. Rajeswara Rao
Pahang	Sunday, 5 July 2015	SMK Hwa Lian	Mr. Prem Kumar Apasamy
Negeri Sembilan	Saturday, 4 July 2015	Nilai Commercial Centre	Mr. Manimaran & Mr. Rajeswara Rao
Melaka	Saturday, 25 July 2015	SJKT Alor Gajoh	Mr. Vigneswara Rao Gannapathy
Johor	Saturday, 9 May 2015	Landmark Hotel, Batu Pahat	Mr. Manimaran & Mr. Ramkumar

Table 9.2: Zone Level Judges Training

9.3 NATIONAL SCIENCE FAIR FOR YOUNG CHILDREN

9.3.1 STUDENT'S RESEARCH PAPER

The Research Paper was previously known as Conference Paper. The concept of the Research Paper remains the same as in the previous years, which is writing about the research conducted for their respective science project. The Research Paper is prepared in a standardised format. In the Research Paper category, students only have to submit their written papers. Previously for conference paper, they also had to present their paper.

The top 2 winning teams from each Zone Level Science Fair were eligible to participate in the Research Paper category. The selected teams have to submit a 4-page paper of their experiment and findings. A special team of judges that was formed reviewed and marked the papers. The marking was done by the judges a week before the event.

The objectives of the Research Paper are as follows:

- To cultivate the concept of research findings and sharing them with the other participants of the Fair in an academic manner.
- To provide an opportunity to write the research findings in an organised and systematic manner.

The guidelines for the Research Paper are as follows:

- Two Research Papers are to be submitted by each zone (Two best teams of Zone Level competition)
- The Research Papers should be written based on the experiment conducted at the Zone Level Science Fair for Young Children.
- The Research Papers can be in either Tamil or English.
- The school is required to only submit the Research Papers as there is no power point presentation to be conducted.
- Central committee will select the best Research Papers submitted by the school.
- The Paper should be written following the format given in template:
- - Font size: 12 point, Font Type: Times New Roman, Spacing: single spacing
- The Paper should not exceed the four (4) pages maximum.

9.3.2 EVENT DAY JUDGING

Judges started to arrive as early as 7.00 am for the Judges Briefing. Breakfast was served to the judges as they were arriving. Briefing started at 8.00 am and was conducted by Mr. Suresh Ramasamy. He started by introducing all the Zone Chief Judges to all the other judges.

Next, he briefed all the judges on the Judging Methodology for Booth Judging as a few changes were made to the marking criteria. After that, he announced the group leaders assigned for each group. Group leaders were chosen after having discussion with all the Zone Chief Judges. A total of 9 groups were formed with 2 teams in each group. Each team had a leader with two judges. Judges from all zones were mixed up in their respective groups. Judges were then asked to prepare questions that will be asked to the contestants later at the booths.

Judges were brought to the judging venue at 9.30 am just after the opening ceremony of the competition. All the judges were asked to observe all the booths first before going to their allocated booths. This was to give them an overall big picture of the booths at the event. The judges were assisted by one facilitator from the organizing event committee. The estimated time allocated for judging was 20 minutes per school; 15 minutes for Booth Judging and 5 minutes for question and answers. All the scores were then tabulated and combined for submission to the Zone Chief Judges for finalizing. The Chief Judges did the final evaluation on the marking. To ensure fairness, in the second round of judging, the selected teams had a different panel of judges to assess their booth. This year, all Zone Chief Judges were involved in the second round judging, with 3 Chief Judges assessing for the placing of 1st to 6th position and 3 other Chief Judges assessing for the placing of 7th to 10th position. The winning school names were then submitted to the Secretariat at the closing ceremony.

A few judges were tasked with marking for the Innovation Category. Innovation Category stands for the development of a new concept or a variation of an existing idea by students using innovative methods or devices for their experiments. All team leaders were asked to identify the schools in their group that showed innovativeness in their projects. These schools were then assessed by the judges chosen for this category. A total of 3 judges were appointed for this task. This judging was done after the main judging process. Judges did the marking by asking simple questions as well as observing the students' presentation and confidence. The judges then assessed and submitted the scores to the Zone Chief Judges for the Innovation Category.

To round off the day of judging, after finalising the marks, Mr. Suresh Ramasamy thanked all the judges who had shown professionalism and commitment to ensure that all the booths were judged fairly and accurately and all the students' work was treated with respect. All the judges were acknowledged by the Organising Committee and were given certificates and a souvenir as a token of appreciation for their time and support.

A post-mortem was immediately held on the judging process for the entire programme (all levels - school, zone and national). The main finding was that SFYC judging process is more rigorous than many other international competitions. However, in the interest of more improvements, some of the recommendations are below:

RECOMMENDATIONS FOR THE FUTURE (Judging)

School Level

- Need to include more specific criteria for scrapbook evaluation.
- Teachers should be trained on the scientific problem-solution approach.
- Specific and structured training to be given to school teachers on judging content.

Zone Level

- Setting the date of competition in advance will enable the Chief Judges to recruit sufficient judges from various disciplines.
- Organisers should prepare the list of Tamil science terminologies that are commonly used by schools in order for the judges to better understand the terms during the evaluation.
- Organisers need to play a more involved role by reminding the schools more often about the logbook and report submission due date.
- Judging criteria for logbook should be revised to include deductions for late submission.
- Questions prepared for ZLSF have to be vetted through by all Zone Level Chief Judges. More time is needed for this and new questions need to be prepared to replace rejected questions. The questions are then to be submitted to NSFYC Committee for their approval. By doing this, all Chief Judges can understand the experiments and questions very well.
- Experiment titles should be given much earlier to the particular Chief Judges to understand the nature of experiments.

National Level

- Better planning is needed to address the issue of punctuality of judges' arrival.
- Comprehensive training related to the theory behind the Innovation Category should be provided to teachers during Teachers Training.
- Recruit new volunteers from various educational institutions and industries.
- Train the judges more with some experimental processes for even better processes and sharing of burden during judging.
- More judges should be selected for logbook and report book checking to share the burden.
- Team leaders for each judge group should be picked according to their expertise and given relevant questions to be judged according to their expertise so that the judging can be done even better.

10 STATEMENT OF ACCOUNTS SFYC 2015

STATEMENT OF INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST OCTOBER 2015

INCOME	NOTES	2015 (RM)	2014 (RM)
Income - Science Fair		230,399.00	280,980.00
Donations From ECM Libra Foundation		-	100,000.00
TOTAL INCOME		**230,399.00**	**380,980.00**
LESS: EXPENDITURE			
Accomodation		3,380.00	10,320.00
Advertisement and Promotion		1,931.00	-
Accounting Fee		2,250.00	2,100.00
Design		16,565.20	3,190.00
Audit Fee		1,500.00	1,500.00
Bank Charges		89.40	112.00
Coordinator Allowances		6,000.00	18,862.00
Depreciation	4	11,312.99	16,343.51
Donation		-	1,000.00
Insurance		2,140.00	1,843.20
Honorium Expenses		3,040.00	3,000.00
Soft Launching Ceremony		-	21,564.76
Food and Staff Refreshment		10,730.00	14,294.79
National Science Fair Expenses		36,538.40	58,532.45
School Level Science Fair Expenses		3,500.00	145,004.00
Zone Level Science Fair Expenses		5,000.00	8,000.00
Zone Level Science Seed Funds		70,100.00	-
School Level Science Seed Funds		-	104,540.00
Other Operating Expenses		1,499.50	-
Postage, Courier & Stamping		1,071.15	1,450.00
Printing & Stationery		15,637.14	57,569.95
Translation Expenses		-	277.00
Video and Photography		4,300.00	1,500.00
Prizes & Souveniers		27,420.00	15,825.00
Training		964.50	8,327.05
Travelling & Transpotation		2,510.00	15,630.00
TOTAL EXPENDITURE		**227,479.28**	**510,785.71**
EXCESS OF EXPENDITURE		*2,919.72*	*(129,805.71)*
INCOME AND EXPENDITURE ACCOUNT			
Total Income		230,399.00	380,980.00
Total Expenditure		227,479.28	51,0785.71
(Deficit) / Surplus		2,919.72	(129,805.71)

The annexed notes from an integral part on the Accounts.

BALANCE SHEET AS AT 31ST OCTOBER, 2015

ASSETS	NOTES	2015 (RM)	2013 (RM)
NON- CURRENT ASSETS			
Property, Plant and Equipment	3 (e) & 4	9,035.63	20,348.62
CURRENT ASSETS			
Other Receivables	5	10,000.00	10,000.00
Amount due from ASTI		20,201.24	42,095.95
Deposits & Prepayments		-	10,120.75
Cash and Bank Balance		6,366.44	801.92
		36,567.68	**63,018.62**
TOTAL ASSETS		***45,603.31***	***83,367.24***
REPRESENTED BY:			
ACCUMULATED FUNDS			
Accumulated Funds b/f		40,433.59	170,239.30
(Deficit) / Surplus For the Year		2,919.72	(129,805.71)
Accumulated Funds c/f		**43,353.31**	**40,433.59**
CURRENT LIABILITIES			
Other Payables		2,250.00	42,933.65
		2,250.00	42,933.65
TOTAL LIABILITIES		2,250.00	42,933.65
TOTAL FUNDS AND LIABILITIES		45,603.31	83,367.24

**The annexed notes from an integral part on the Accounts.*


Welcome ALL

11 RECOMMENDATIONS FOR THE FUTURE

Here are some recommendations that were suggested during the Coordinators and Working Group Committee postmortem SWOT analysis for the future improvement of SFYC.

11.1 WORKING GROUP COMMITTEE

- Improve the WGC members' attendance for the meeting
- Strongly encourage to start the SFYC planning and funding earlier
- Coordinator strongly encourage the need to improve reporting system
- Explore more funding options

11.2 SCHOOL LEVEL SCIENCE FAIR

- Provide scientific notes to media to present to public
- Early Brainstorming among coordinator
- Request MGB to gather all HM Council to discuss on solutions for problem during Science Fair and to share ideas.

11.3 ZONE LEVEL SCIENCE FAIR

- Emphasize and Standardizes prizes for ZLSF
- Coordinators are encourage to follow the ZLSF SOP
- Proposed to organize Zone Level Science Fair after UPSR exam or much earlier

11.4 NATIONAL LEVEL SCIENCE FAIR

- Encourage more schools to participate in NSFYC
- Encourage to find comfortable and convenience venue in Klang Valley

11.5 TRAINING

- Strongly encouraged to give more briefing and guidance to teachers.
- Request to provide CD & Experiment title before teachers training.
- Request to have the training session in more than 2 places in Perak.

11.6 EVENT COMMITTEE

- Strongly encourage to invite aduquate number of volunteers
- Encourage to invite more media people for publicity of the event
- Encourage to prepare walkie talkie for the head of department
- Strongly encourage to have rehearsal before the prize giving ceremony

12 CONCLUSION

A total of 327 schools successfully participated in School Level Science Fairs. Meanwhile, 221 schools took part in Zone Level Science Fairs held in 9 zones nationwide. The National Level event took place on 3rd October 2015 at Manipal International University, Nilai. Our survey results show positive response from all stakeholders. Funding remains the main stumbling block for the advancement of the project.

> **Science is the captain, and practice the soldiers.**
>
> *- Leonardo da Vinci*

APPENDIX A :
ZONE LEVEL SCIENCE FAIR PARTICIPATION LIST

ZONE 1: KEDAH

NO	NAME OF SCHOOL	TITLE
1	SJKT Ladang Sungai Batu	Sound
2	SJKT Ladang Bukit Sidim	Solar Cooker
3	SJKT Somasundram	Windmill
4	SJKT Barathy	Sound
5	SJKT Bedong	Solar Cooker
6	SJKT Palanisamy Kumaran	Windmill
7	SJKT Jabi	Sound
8	SJKT Wellesly	Calories
9	SJKT Ladang Pelam	Osmosis
10	SJKT Darul Aman	Calories
11	SJKT Ladang Sungai Para	Osmosis
12	SJKT Sungai Ular	Calories
13	SJKT Ketumba	DNA
14	SJKT Dublin Bhg.5	Water Pressure
15	SJKT Binjol	Clock's Pendulum
16	SJKT Ladang Henrietta	Boat's Hull
17	SJKT Tun Sambanthan	Lift A Load
18	SJKT Ladang Tupah	Clock's Pendulum
19	SJKT BMR	Boat's Hull
20	SJKT Sungai Tok Pawang	Lift A Load
21	SJKT Scarbora	Clock's Pendulum
22	SJKT Ladang Lubuk Segintah	Lift A Load
23	SJKT Ladang Bukit 9	Blub Wattage
24	SJKT Mahajothi	Power A Light
25	SJKT Kalaivaani	Magnet Stages
26	SJKT Ladang Perbadanan	Power A Light
27	SJKT Saraswathy	Magnet Stages
28	SJKT Paya Kemunting	Power A Light
29	SJKT Paya Besar	Magnet Stages
30	SJKT Bukit Jenun	Amount Of Acid
31	SJKT Harvard 1	Chlorine
32	SJKT Ladang Bt.Pekaka	Amount Of Acid
33	SJKT Ladang Malakof	Chlorine
34	SJKT Kalaimagal	Amount Of Acid
35	SJKT Kulim	Chlorine
36	SJKT Ladang Harvard 3	Packaging Material

ZONE 2: PENANG

NO	NAME OF SCHOOL	TITLE
1	SJKT Ladang Alma	Bulb's Wattage
2	SJKT Ladang Sempah	Clock's Pendulum
3	SJKT Jalan Sungai	Sound
4	SJKT Ladang Juru	Amount Of Acid In Food
5	SJKT Bukit Mertajam	Boat's Hull
6	SJKT Nibong Tebal	Boat's Hull
7	SJKT Mak Mandin	Water Pressure
8	SJKT Ladang Valdor	Lift A Load
9	SJKT Ladang Batu Kawan	Food Calori
10	SJKT Rajaji	Food Calori
11	SJKT Permatang Tinggi	Solar Cell
12	SJKT Ramakrishna	Solar Cell
13	SJKT Ladang Prye	Power A Light
14	SJKT Bayan Lepas	Power A Light
15	SJKT Ladang Transkrian	Elasticity Of Rubber
16	SJKT Subramaniya Barathee	A Liquid's Temperature
17	SJKT Sungai Ara	Packaging Material
18	SJKT Tasek Permai	Chlorine In Water
19	SJKT Palaniandy	Chlorine In Water
20	SJKT Perai	Osmosis

ZONE 3: PERAK

NO	NAME OF SCHOOL	TITLE
1	SJKT Ladang Kati, Sauk, Kuala Kansar	Power A Light
2	SJKT St Theresa's Convent Taiping	Elasticity Of Rubber
3	SJKT Ladang Elphil	Solar Cooker
4	SJKT Ladang Rubana	Solar Cooker
5	SJKT Keruh, Pengkalan Hulu, Perak	Water Pressure
6	SJKT Perak Sangeetha Sabah	DNA
7	SJKT Chettiars	Amount Of Acid In Food
8	SJKT Ladang Gapis	Boat's Hull
9	SJKT Ladang Allagar	Chlorine In Water
10	SJKT Klebang, Chemor	Lift A Load
11	SJKT Ladang Chnagkat Salak	Bulb's Wattage
12	SJKT Ladang Serapoh	Packaging Material
13	SJKT Menglembu, Perak	Amount Of Acid In Food
14	SJKT Kg Simee	Bulb's Wattage
15	SJKT Ldg Glenealy	Boat's Hull
16	SJKT Ladang Buloh Akar	Food Calori
17	SJKT Slim River	Windmill's Sail
18	SJKT Ladang Kuala Bernam,	Water Pressure
19	SJKT Ladang Bidor Tahan	Clock's Pendulum
20	SJKT Ladang Teluk Bharu	Power A Light
21	SJK(T/Te) Bagan Datoh	Solar Cell
22	SJKT Selama	Magnet Stages
23	SJKT Tan Sri Dato Manickavasagam	Sound
24	SJKT Tanjong Rambutan,Perak	Lift A Load
25	SJKT Gandhi Memorial	Osmosis
26	SJKT Ladang Chemor	Photosynthesis.
27	SJKT Ladang Cluny	Photosynthesis.
28	SJKT Trolak	A Liquid's Temperature
29	SJKT Maha Ganesa Viddyasalai	Bboat's Hull
30	SJKT Bagan Serai	Lift A Load
31	SJKT Kerajaan,Ipoh	Photosynthesis.
32	SJKT Ladang Dovenby,	Sound
33	SJKT Gopeng	Amount Of Acid In Food
34	SJKT Kamunting	Windmill's Sail
35	SJKT Ladang Sungai Biong	Windmill's Sail
36	SJKT Mahathma Gandhi Kalasalai	Magnet Stages
37	SJKT Gunung Rapat	Water Pressure
38	SJKT Ladang Sungai Kruit	Clock's Pendulum


SJKT KIRBY
A
B
C

ZONE 4: SELANGOR

NO	NAME OF SCHOOL	TITLE
1	SJKT Bestari Jaya	Bulb's Wattage
2	SJKT Rawang	Bulb's Wattage
3	SJKT Vageesar	Power A Light
4	SJKT Sungai Sedu	Power A Light
5	SJKT Vivekananda, Petaling Jaya	Dna
6	SJKT Kajang	Clock's Pendulum
7	SJKT Sepang	Chlorine In Water
8	SJKT Ladang Midlands	Chlorine In Water
9	SJKT Seaport	Chlorine In Water
10	SJKT Teluk Merbau	Boat's Hull
11	SJKT Ladang Nigel Gardner	Sound
12	SJKT Pulau Carey Barat	Solar Cooker
13	SJKT Kuala Kubu Bharu	Sound
14	SJKT Batu Arang	Solar Cooker
15	SJKT Jalan Meru	Sound
16	SJKT Batu Caves	Food Calori
17	SJKT Ladang Braunston	Lift A Load
18	SJKT Tun Sambanthan	Windmill
19	SJKT Taman Permata	Windmill
20	SJKT Jenjarom	Lift A Load
21	SJKT Castlefiled	Elasticity Of Rubber
22	SJKT Ladang Kinrara	Water Pressure
23	SJKT Methodist Bukit Kapar	Osmosis
24	SJKT Ladang Sungai Tinggi	Water Pressure
25	SJKT Serdang	Photosynthesis

ZONE 5: KUALA LUMPUR

NO	NAME OF SCHOOL	TITLE
1	SJKT Appar	Power A Light
2	SJKT Jalan Cheras	Bulb's Wattage
3	SJKT Bangsar	Clock's Pendulum
4	SJKT Segambut	Clock's Pendulum
5	SJKT Saraswathy	Magnet Stages
6	SJKT Sentul	Lift A Load
7	SJKT Vivekananda, Kuala Lumpur	Lift A Load
8	SJKT St. Joseph	Water Pressure
9	SJKT Thamboosamy	Osmosis

ZONE 6: NEGERI SEMBILAN

NO	NAME OF SCHOOL	TITLE
1	SJKT Ladang Kirby	Bulb's Wattage
2	SJKT Ladang Senawang	Clock's Pendulum
3	SJKT Ladang Saga	Bulb's Wattage
4	SJKT Ladang Regent	Clock's Pendulum
5	SJKT Ladang Juasseh	Bulb's Wattage
6	SJKT Kuala Pilah	Sound
7	SJKT Ladang Kubang	Amount Of Acid In Food
8	SJKT Ladang Middleton	Sound
9	SJKT Ladang Air Hitam	Amount Of Acid In Food
10	SJKT Ladang Geddes	DNA
11	SJKT Tun Sambanthan	Lift A Load
12	SJKT Ladang Pertang	Boat's Hull
13	SJKT Ladang Tampin Linggi	Lift A Load
14	SJKT Ladang Jeram Padang	Boat's Hull
15	SJKT Ladang Lenggeng	Lift A Load
16	SJKT Ladang St.leonards	Food Calori
17	SJKT Sungai Salak	Power A Light
18	SJKT Tampin	Elasticity Of Rubber
19	SJKT Perhentian Tinggi	Power A Light
20	SJKT Ladang Batang Benar	Packaging Material
21	SJKT Lorong Jawa	Windmill
22	SJKT Ladang Lobak	Photosynthesis
23	SJKT Convent	Windmill
24	SJKT Ladang Cairo	Clorine
25	SJKT Nilai	Windmill

ZONE 7: MELAKA

NO	NAME OF SCHOOL	TITLE
1	SJKT Rumbia	Sound
2	SJKT Pulau Sebang	Water Pressure
3	SJKT Alor Gajah	Magnet Stages
4	SJKT Ladang Diamond Jubilee	Power A Light


Science Fair for Young Children
SFYC
அறிவியல் விழா
இளம் ஆய்வாளர்களி
தேசிய அறிவியல் விழா
National Science Fair
for Young Children 20
DATE
TIME
10.2015
4.00PM
ITY
NILA
ACHIEVEMENT
SFYC
SCIENCE FAIR FOR
YOUNG CHILDREN 2015
5TH PLACE
500
SRI

ZONE 8: JOHOR

NO	NAME OF SCHOOL	TITLE
1	SJKT Ladang Tangkak	Bulb's Wattage
2	SJKT Ladang Pasak	Bulb's Wattage
3	SJKT Kangkar Pulai	Bulb's Wattage
4	SJKT Mersing	Clock's Pendulum
5	SJKT Ban Heng	Clock's Pendulum
6	SJKT Kulai Oil Palm	Sound
7	SJKT Tun. Dr. Ismail	Sound
8	SJKT Ladang Lambak	Sound
9	SJKT Ladang Pelepah	Sound
10	SJKT Seri Pelangi	Amount Of Acid
11	SJKT Tajul	Amount Of Acid
12	SJKT Gelang Patah	Boat's Hull
13	SJKT Taman Tun Aminah	Boat's Hull
14	SJKT Nam Heng	Boat's Hull
15	SJKT Ladang Yong Peng	Water Pressure
16	SJKT Southern Malay	Water Pressure
17	SJKT Batu Anam	Solar Cooker
18	SJKT Ladang Rini	Solar Cooker
19	SJKT Masai	DNA
20	SJKT Jalan Khalidi	Lift A Load
21	SJKT Kahang	Lift A Load
22	SJKT Lanadron	Lift A Load
23	SJKT Bekoh	Lift A Load
24	SJKT Pamol	Lift A Load
25	SJKT Ladang Sagil	Caloiri
26	SJKT Yahya Awal	Caloiri
27	SJKT Ladang REM	Caloiri
28	SJKT Sungai Muar	Caloiri
29	SJKT Bukit Renggam	Power A Light
30	SJKT Mados	Power A Light
31	SJKT Haji Manan	Power A Light
32	SJKT Bukit Serampang	Power A Light
33	SJKT Desa Cemerlang	Power A Light
34	SJKT Temiang Renchang	Power A Light
35	SJKT Kulai Besar	Magnet Stages
36	SJKT Ladang Simpang Renggam	Elasticity Of Rubber
37	SJKT Ladang Tebrau	Elasticity Of Rubber
38	SJKT Ladang Mount Austin	Elasticity Of Rubber
39	SJKT Ladang Palaniappa	Packaging Material
40	SJKT Ladang Ulu Tiram	Packaging Material
41	SJKT Permas Jaya	Windmill
42	SJKT Jalan Parit Ibrahim	Photosynthesis
43	SJKT Pasir Gudang	Clorine
44	SJKT Ladang Kelan	Clorine
45	SJKT Sungai Plentong	Osmosis

ZONE 9: PAHANG

NO	NAME OF SCHOOL	TITLE
1	SJKT Bandar Indera Mahkota	Packaging Material
2	SJKT Kuala Reman	Power A Light
3	SJKT Ladang Lanchang	Amount Of Acid
4	SJKT Ladang Sungai Kawang	Bulb's Wattage
5	SJKT Ladang Edensor	Windmill's
6	SJKT Ladang Semantan	Lift A Load
7	SJKT Mentakab	Calories.
8	SJKT Ladang Sungai Tekal	Chlorine
9	SJKT Ladang Bee Yong	Osmosis
10	SJKT Jerantut	Bulb's Wattage
11	SJKT Ladang Ycl	Solar Cooker
12	SJKT Ladang Karmen	Photosynthesis
13	SJKT Ladang Kemayan	Clock's Pendulum's
14	SJKT Karak	Clock's Pendulum's
15	SJKT Raub	Water Pressure
16	SJKT Ladang Gali	Power A Light.
17	SJKC Sungai Jerik	Boat's Hull
18	SJKT Ringlet	Solar Cooker
19	SJKT Ladang Blue Valley	Elasticity Of Rubber
20	SJKT Ladang Shum Yip Leong	Boat's Hull


Science Fair for Young Children
SFYC
அறிவியல் விழா
இளம் ஆய்வாளர்களின்
தேசிய அறிவியல் விழா
National Science Fair
for Young Children 2015
DATE
03.10.2015
TIME
12.00 NOON - 4.00PM
ACHIEVEMENT
ACHIEVEMENT
ACHIEVEMENT
CHAMPION
RM 500

APPENDIX B :
NATIONAL LEVEL SCIENCE FAIR PARTICIPATION LIST

NO	NAME OF SCHOOL	ZONE	TITLE
1	SJKT Wellesly	Kedah	Food Calori
2	SJKT Bedong	Kedah	Solar Cooker
3	SJKT Binjol	Kedah	Clock's Pendulum
4	SJKT Ladang Bukit Pekaka	Kedah	Amount of Acid In Food
5	SJKT BMR	Kedah	Boat's Hull
6	SJKT Sungai Ular	Kedah	Water Pressure
7	SJKT Ladang Sungai Batu	Kedah	Power A Light
8	SJKT Scarbora	Kedah	Clock's pendulum
9	SJKT Mahajothi	Kedah	Power A Light
10	SJKT Ramakrishna	Penang	Solar Cell
11	SJKT Ladang Valdor	Penang	Windmill's Sail
12	SJKT Ladang Alma	Penang	Bulb's Wattage
13	SJKT Subramaniam Barathy	Penang	Boat's Hull
14	SJKT Bukit Mertajam	Penang	Packaging Material
15	SJKT Permatang Tinggi	Penang	Solar Cooker
16	SJKT Mahathma Gandhi Kalasalai	Perak	Magnet Stages
17	SJKT Keruh, Penkalan Hulu	Perak	Water Pressure
18	SJKT Ladang Bidor Tahan	Perak	Clock's Pendulum
19	SJKT St. Theresa's Convent Taiping	Perak	Elasticity of Rubber
20	SJKT Trolak	Perak	A Liquid's Temperature
21	SJKT Ladang Kuala Bernam	Perak	Water Pressure
22	SJKT Maha Ganesa Viddyasalai	Perak	Boat's Hull
23	SJKT Ladang Changkat Salak	Perak	Light Bulb's Wattage
24	SJKT Ladang Serapoh	Perak	Packaging Material
25	SJKT Segambut	Wilayah	Clock Pendulum
26	SJKT Saraswathy	Wilayah	Magnet Stages
27	SJKT Taman Permata	Selangor	Windmill's Sail
28	SJKT Tun Sambanthan	Selangor	Windmill's Sail
29	SJKT Teluk Merbau	Selangor	Boat's Hull
30	SJKT Ladang Nigel Gardner	Selangor	Types Of Liquid
31	SJKT Vageesar	Selangor	Power A Light
32	SJKT Rawang	Selangor	Bulb's Wattage
33	SJKT Convent	N.Sembilan	Windmill's Sail
34	SJKT Nilai	N.Sembilan	Windmill's Sail

NO	NAME OF SCHOOL	ZONE	TITLE
35	SJKT Ladang Middleton	N.Sembilan	Sound
36	SJKT Ladang Kirby	N.Sembilan	Bulb's Watttage
37	SJKT Ladang Pertang	N.Sembilan	Boats Hull
38	SJKT Ldg Senawang	N.Sembilan	Bulb Wattage
39	SJKT Ladang Saga	N.Sembilan	Clock's Pendulum
40	SJKT Pulau Sebang	Melaka	Water Pressure
41	SJKT Alor Gajah	Melaka	Magnet Stages
42	SJKT Taman Tun Aminah	Johor	Boat's Hull
43	SJKT Kulai Besar	Johor	Magnet Stages
44	SJKT Jalan Yahya Awal	Johor	Food Calories
45	SJKT Masai	Johor	DNA
46	SJKT Pasir Gudang	Johor	Chlorine In Water
47	SJKT Jalan Sialang	Johor	Clock's Pendulum
48	SJKT Ladang Palaniappa	Johor	Packaging Material
49	SJKT Kangkar Pulai	Johor	Bulb's Wattage
50	SJKT Jalan Khalidi	Johor	Lift A Load
51	SJKT Jalan Haji Manan	Johor	Power A Light
52	SJKT Desa Cemerlang	Johor	Power A Light
53	SJKT Ban Heng	Johor	Clock's Pendulum
54	SJKT Bandar Mentakab	Pahang	Caloiri
55	SJKT Ladang Bee Yong	Pahang	Osmosis
56	SJKT Ladang Lanchang	Pahang	Amount of Acid
57	SJKT Ladang Edensor	Pahang	Windmill
58	SJKT Sungai Tekal	Pahang	Clorine
59	SJKT Raub	Pahang	Water Pressure
60	SJKT Blue Valley	Pahang	Elasticity of Rubber

APPENDIX C :
PARTIALLY GUIDED EXPERIMENTS FOR SFYC 2015

1. How does a light bulb's wattage affect the amount of heat produced? Design an experiment to investigate the query above and explain the concepts involved.

2. Does the mass of a clock's pendulum affect its period? Design an experiment to investigate the query above and explain the concepts involved.

3. Does the type of liquid in a container affect the sound it produces? Design an experiment to investigate the query above and explain the concepts involved.

4. Different food products contain different amount of acid. Design an experiment to investigate the statement above and explain the concepts involved.

5. How does the shape of a boat's hull affect its' speed? Design an experiment to investigate the query above and explain the concepts involved.

6. How does water pressure vary with depth? Design an experiment to investigate the query above and explain the concepts involved.

7. How does the design of a solar cooker affect its temperature? Design an experiment to investigate the query above and explain the concepts involved.

8. Different food samples contain different amount of DNA. Design an experiment to investigate the statement above and explain the concepts involved.

9. Using a simple machine, design an experiment to lift a load using less force. Explain the concepts involved.

10. Different food samples contain different amount of calories. Design an experiment to investigate the statement above and explain the concepts involved.

11. How does the angle of the Sun striking a solar cell affect how much electricity the cell produces? Design an experiment to investigate the statement above and explain the concepts involved.

12. Design an experiment to determine whether there is enough energy stored in a fruit or a vegetable to power a light. Explain the concepts involved.

13. Build a very simple magnetic accelerator to launch steel balls at targets and prove that the velocity of the projectile would increase as number of magnet stages increased. Explain the concepts involved.

14. How will temperature affect the elasticity of rubber? Design an experiment to investigate the query above and explain the concepts involved.

15. Design an experiment to observe how increasing a liquid's temperature can affect its' surface tension. Explain the concepts involved.

16. Investigate what kind of packaging material works best to protect products from damage. Explain the concepts involved.

17. How does the size of a windmill's sail affects the amount of electricity produced? Design an experiment to investigate the query above and explain the concepts involved.

18. Amount of light affects the rate of photosynthesis. Design an experiment to investigate the statement above and explain the concepts involved.

19. Design an experiment to find out the best way to remove chlorine in water. Explain the concepts involved.

20. Different concentration of solutions affects the rate of osmosis. Design an experiment to investigate the statement above and explain the concepts involved.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அறிவியல் விழா
இளம் ஆய்வாளர்களின்
தேசிய அறிவியல் விழா
National Science Fair
for Young Children 2015
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இளம் ஆய்வாளர்களின்
அறிவியல் விழா 2015
SCIENCE FAIR FOR
YOUNG CHILDREN 2015
CONSOLATION
RM 250

APPENDIX D :
SFYC2015 IN MEDIA : SELECTED SAMPLES

இளம் ஆய்வாளர்கள் : யாஹ்யா அவால் தமிழ்ப்பள்ளி மாணவர்கள் பன்னாட்டுச் சாதனை

என். முந்தரன்

ஜோகூர், ஜூன் 10–
கடந்த 5,6ஆம் நாட்களில் தென்கொரியா, சியோல் நகரில் கங் மு மாநாட்டு மண்டபத்தில் நடைபெற்ற பன்னாட்டு இளம் ஆய்வாளர்களின் புதிய கண்டுபிடிப்புப் போட்டி நடைபெற்றது.

பன்னாட்டு அளவில் உலகப் புத்தாக்கக் கண்டுபிடிப்புப் போட்டிக்கு யாஹ்யா அவால் தமிழ்ப்பள்ளியின் இந்நாள் மாணவர்கள் மூன்று பேரும் முன்னாள் மாணவர்கள் ஐவரும் தேர்வாகினர்.

சாதனைத் திலகங்களுக்குத் தினக்குரல் பாராட்டு விழா

ப. புவனேஸ்வரன்

கோலாலம்பூர், ஏப்.12–
அனைத்துலக ரீதியில் சாதனை படைத்துவரும் மலேசிய தமிழ்ப்பள்ளி மாணவர்களை அங்கீகரித்து, அவர்களை கௌரவிக்கும் விழா ஒன்றினை **தினக்குரல்** நடத்தவிருக்கிறது. வரும் ஏப்.16ஆம் தேதி, வியாழக்கிழமை தலைநகர் நேதாஜி மண்டபத்தில் இந்த விழா மிகச் சிறப்பாக நடைபெறும் என்று விழா ஏற்பாட்டுக் குழுத் தலைவர் ராஜா சைமன் கூறினார்.

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Striking gold in Seoul
Students make Malaysia proud with three awards at invention contest in South Korea. >10

ஆசிய இளம் ஆய்வாளர்கள் போட்டி:

ராமகிருஷ்ணா தமிழ்ப்பள்ளிக்கு

2 தங்க விருதுகள்

(ஐ.எஸ்.சத்தியசீலன்)

கோலாலம்பூர், மே 23-

ஆசிய அளவில் 30க்கும் மேற்பட்ட நாடுகள் பங்கு கொண்டுள்ள இளம் ஆய்வாளர்கள் போட்டியில் பினாங்கு ராமகிருஷ்ணா தமிழ்ப்பள்ளியைச் சேர்ந்த க.ஷாலினி பிரியங்கா, வி.உஷா சந்திரிகா, ச.வைஷ்ணவி, கேலின் எவிலின் தோமஸ், து.ஷியாமளா, பொ.சுபாஷினி ஆகியோர் இரு தங்க விருதுகள் வென்று சாதனை படைத்துள்ளனர்.

13

முதல் பக்கத் தொடர்ச்சிகள்...

ஆசிய இளம் ஆய்வாளர்கள்...

தலைநகர் கோலாலம்பூர் மாநாட்டு மையத்தில் (கோல்சிசி) மூன்று நாட்களாக நடைபெற்று வருகின்ற இப்போட்டியில், சுற்றுச்சூழல் அமைதியை களைக்கும் கருவிகளின் ஓசையை குறைக்கக்கூடிய தொழில்நுட்பத்தை சமர்ப்பித்து ஆசியா உட்பட மலேசியா அளவில் அம்மாணவர்கள் தங்க விருதுகளை வென்றதானது அனைவரையும் மலைக்கச் செய்துவிட்டது.

இதற்கு முன்னர், இதே பள்ளியைச் சேர்ந்த இன்னொரு மாணவர் குழுவினர் சீனாவில் நடைபெற்ற இளம் ஆய்வாளர்கள் போட்டியில் தங்க விருதை வென்று சாதனை படைத்தனர் என்பது குறிப்பிடத்தக்கது. ஆரம்பம் மற்றும் இடைநிலைப்பள்ளி அளவிலான பிரிவில் ராமகிருஷ்ணா தமிழ்ப்பள்ளியோடு ஜொகூர் பாரு ஜாலான் யாஹ்யா அவால் தமிழ்ப்பள்ளியைச் சேர்ந்த தி.நிவேதிதா, ந.பவநந்தினி, நா.லெனிஷா ஆகியோர் போட்டியில் களமிறங்கினர். அம்மாணவர் குழுவினர் ஆசியா மற்றும் மலேசியா அளவில் முறையே இரண்டு வெண்கல விருதுகளை வென்றனர். இவ்விரு தமிழ்ப்பள்ளி மாணவர்களின் அபார சாதனையால் இந்திய சமூகமும் நாடும் பெருமிதம் கொள்கிறது என தமிழ்ப்பள்ளி ஆய்வாளர்களை ஊக்குவித்து வருகின்ற அறிவியல், தொழில்நுட்பம், கண்டுபிடிப்பு சங்கத்தின் (அஸ்தி) தலைவர் முகமது யுனுஸ் தெரிவித்தார்.

அண்மைய காலமாக தமிழ்ப்பள்ளி மாணவர்களின் சாதனையானது கடல்கடந்தும் வியாபிக்கத் தொடங்கி விட்டது. இது ஒரு நல்ல தொடக்கம். உலகில் எந்தெந்த மூலையில் தொழில்நுட்ப கண்டுபிடிப்பு தொடர்பான போட்டிகள் நடைபெற்றாலும் அதற்கு நம் மாணவர்களை தயார்ப்படுத்தி அனுப்பி வைக்க வேண்டும். இதன் வளர்ச்சியானது பின்னாளில் நம் சமூகத்தின் சீரமிகு முன்னேற்றத்திற்கான மைல்கல்லாகக் கூட மாறும் என்று முகமது யுனுஸ் மலேசிய நண்பனிடம் தெரிவித்தார். அறிவியல் கண்டுபிடிப்புகளில் தமிழ்ப்பள்ளி மாணவர்களை ஈடுபாடு கொள்ளச் செய்கின்ற இவர், மேற்குறிப்பிட்ட இரு தமிழ்ப் பள்ளிகளும் இப்போட்டியில் பங்கேற்பதற்கான வழிகாட்டுதலை இவர் வழங்கியிருக்கிறார். இவரின் சமூகப் பணிக்கு நன்றி தெரிவித்துக் கொண்ட ராமகிருஷ்ணா தமிழ்ப்பள்ளியின் தலைமையாசிரியை திருமதி புவனேஸ்வரி, சாதனை படைத்த மாணவர்களுக்கு பாராட்டுதலை தெரிவித்துக் கொண்டதோடு வெற்றிக்கு உறு துணையாக இருந்த அனைத்து தரப்பினருக்கும் பள்ளி சார்பாக நன்றியை புலப்படுத்திக் கொண்டார்.

3 லட்சம் போட்டியாளர்கள் கலந்து கொண்ட போட்டியில் 3 தங்கங்கள் வென்று இராமகிருஷ்ணா தமிழ்ப்பள்ளி மாணவர்கள் சாதனை

டி.ஆர்.ராஜா

செய்திகள்

11-4-2015 – சனிக்கிழமை / தினக்குரல் 15

அறிவியல் - கணிதம் ஆகிய பாடங்களில் தமிழ்ப்பள்ளி மாணவர்கள் தொடர்ந்து சாதனை

காயிதாஸ் சுப்ரமணியம்
படங்கள் : மா. பவனச்செல்வன்

இந்திய மாணவர்களின் அறிவியல் ஆற்றலை வெளிக்கொணரும்

இளம் ஆய்வாளர்கள் விழா!

(ஆர்.குணா)

கோலாலம்பூர், பிப்.21-

தமிழ்ப்பள்ளி மாணவர்களின் அறிவியல் ஆற்றலை வெளிக் கொணரும் வகையில் கடந்த 9 ஆண்டுகளாக இளம் ஆய்வாளர்களின் அறிவியல் விழா ஏற்பாடு செய்யப்பட்டு வருகிறது.

அந்த வகையில் இவ்வாண்டு நடைபெறவுள்ள இந்த விழாவின் அறிமுக விழா நேற்று காலை தலைநகரிலுள்ள பிரசித்திப் பெற்ற தங்கும் விடுதியில் நடைபெற்றது. தமிழர்கள் ஆதிகாலம் முதல் அறிவியல் துறையில் அதிக நாட்டமும் தொடர்பும் உடையவர்கள். அந்த பாரம்பரியத்தில் தோன்றிய நாமும் நம் மாணவர்கள் மத்தியில் உள்ள அறிவியல் திறனை வெளிப்படுத்த வேண்டும்.

அந்த வகையில்தான் இந்த 10ஆம் ஆண்டு அறிவியல் விழாவை ஏற்பாடு செய்து வருவதாக அஸ்தி அமைப்பின் துணைத் தலைவர் கு.சுப்பிரமணியம் தெரிவித்தார்.

இம்முறை நடத்தப்படும் விழாவை தமிழ்ப்பள்ளிகளின் மேம்பாட்டுத் திட்ட வரைவு குழுவின் ஒருங்கிணைப்பாளர் பேராசிரியர் டத்தோ டாக்டர் என்.எஸ்.ராஜேந்திரன் அதிகாரப்பூர்வமாக தொடக்கி வைத்தார்.

இம்முறை அறிவியல் விழா பள்ளி நீதியில், மாநில நீதியில், தேசிய நீதியில் என மூன்று பிரிவுகளாக நடத்தப்படவுள்ளது. வரும் மார்ச் மாதம் பள்ளிகள் நீதியிலான போட்டி நடைபெறவுள்ளது.

மேலும் இந்த அறிவியல் விழாவின் போட்டிகள், அதன் குறுந்தட்டுகள் அனைத்தும் தமிழ்ப்பள்ளிகளுக்கும் வழங்கப்படவுள்ளன என அவர் சொன்னார்.

மாநில நீதியிலான போட்டிகள் எப்ரல் மாதம் இறுதி தொடங்கி மே மாதம் முதல் இரு வாரங்களில் முடிவடையும். அதன் பின்னர் ஜூலை மாதம் முதலாம், இரண்டாம் வாரங்களில் தேசிய நீதியிலான போட்டி பாங்கியிலுள்ள ஜெர்மன் மலேசிய கல்விக் கூடத்தில் நடைபெறும் என்றார்.

இதுநாள் வரை பல அமைப்புகளின் உதவியுடன் இந்த விழா மேற்கொள்ளப்பட்டு வந்தது. இம்முறையும் அவர்களின் பங்களிப்பு முழுமையாக உள்ளது.

பிரதமர் துறையின் கீழ் செயல்படும் சிடிக் அமைப்பின் மூலம் பெறப்பட்ட மானியம் இந்த திட்டத்தை மேலும் சிறப்பாக நடத்த உதவியாக உள்ளதாக சுப்பிரமணியம் தெரிவித்தார்.

முழு விவரங்கள், எளிமையான பரிசோதனை செய்யும் முறைகள், அறிவியலாளர்கள் பற்றிய தகவல்கள் போன்ற பல முக்கியமான விவரங்கள் அடங்கிய இரு

சாதனைக்கு குறைகள் தடைக்கல் அல்ல

உலக அளவில் தமிழ்ப்பள்ளி மாணவர்கள் கொடி கட்டி பறக்கின்றனர்

கோலாலம்பூர், மார்ச் 31-

அனைத்துலக அறிவியல் விழா யாழ்ற்யா அல்வாள், இராமகிருஷ்ணா தமிழ்ப்பள்ளிகள் பங்கேற்கின்றன

ப.புவனேஸ்வரன்

கோட்டகினி தொலை,
ஏப். 28–

நாட்டில் நடைபெறுகிறும் அனைத்துலக சிறிலான அறிவியல் விழாவில் வாழ்து கோள் வெற்றுநாள்கு பள்ளிகளுக்கு பட்டுமே வாய்ப்புக் கிடை தற்போதும் நிலையில், அவர்கள்

அனைத்துலக அறிவியல் ....

இரண்டு தமிழ்ப்பள்ளிகள் என்பது மகிழ்ச்சிகுரியதாகும்.

தன்னி எனப்படும் அறிவியல் தொழில்நுட்பப் பூங்காக இயக்கத்தின் நிதித் திட்டம் விருத்து நிகழ்ச்சியில் உரையாற்றியபோது அமையக்கத்தின் உதவித் தலைவர் சுப்பாணியம் குருசாமி அத்தகவலைக் கொன்னார்.

அனைத்துலக சிறிலில் நடைபெறுகிறும் இந்த அறிவியல் விழாவில் நான்கு பள்ளிகளுக்கு வாய்ப்பு வழங்கப்பட்டிருக்கிறது. அதில் ஒன்று தேசியப் பள்ளி. இன்னொன்று சீனப்பள்ளியாகும். இந்த இரண்டும் தமிழ்ப்பள்ளிகள் என்பதால் அறிவியல் தொழில்நுட்ப பூங்காக இயக்கத்திற்குக் கிடைத்த வெற்றி ஆகும்.

தோட்டம் பாரு யாழ்ற்யா அல்வாள் தமிழ்ப்பள்ளி, சோங்கு இராமகிருஷ்ணா தமிழ்ப்பள்ளி ஆகிய இரண்டு பள்ளிகளும் இந்த அனைத்துலக அறிவியல் விழாவில் பங்கேற்கவிருக்கின்றன.

தன்னையில் பெட்டிங்கில் நடைபெற்ற 35ஆவது அனைத்துலக அறிவியல் விழாவில் பங்கேற்ற இராமகிருஷ்ணா தமிழ்ப்பள்ளி மாணவர்கள் முதல்நிலை வெற்றியாளர்களாக தேர்ந்தெடுக்கப்பட்டிருக்கின்றனர் என்பது குறிப்பிடத்தக்கது.

இதைத் தொடர்ந்து கடந்த 9 ஆண்டுகளாக அறிவியல் தொழில்நுட்பத்தைக் கற்றுக்கொண்டு வந்த நடவடிக்கைகளுக்கும் முயற்சிகளுக்கும் கிடைத்த பலனாகவே இந்த வெற்றி கருதப்படுகிறது என்றும் கல்வியாளர் குறிப்பிட்டனர்.

மாணவர்கள்

தங்கள் கண்டுபிடிப்புகளுடன் பெருமையுடன் காட்சியளிக்கும் மாணவ, மாணவியர், பெற்றோர்

மூன்றாவது இடத்தில் வெற்றி பெற்ற ஜொகூர் கூலாய் பெசார் தமிழ்ப்பள்ளி மாணவச் செல்வங்கள், பரிசுகளை வழங்கியவர் டத்தின்ஸ்ரீ கனகம் பழனிவேல்

மாணவர்களின் கைவண்ணங்களை பார்வையிடுகிறார் முகிலன்

நடத்தப்பட்ட அறிவியல் போட்டி பரிசளிப்பு விழாவில் பேசிய மலேசிய தமிழ்ப்பள்ளிகளின் மேம்பாட்டு திட்ட வரைவு ஒருங்கிணைப்பாளர் டத்தோ டாக்டர் என்.எஸ்.இராஜேந்திரன் இவ்வாறு குறிப்பிட்டார்.

நமது தமிழ்ப்பள்ளி மாணவர்களின் கல்வித் தரம் நல்ல அடைவு நிலை கண்டுள்ளதுடன் அறிவியல், கணக்கு, ஆங்கிலம் போன்ற பாடங்களில் மற்ற பள்ளி மாணவர்களை விடச் சிறந்து விளங்க அறிவியல் விழாவில் கலந்து கொள்ளும் மாணவர்களின் திறன் மேம்பாடு காண உதவுகிறது என்றார் அவர்.

அதற்குச் சான்று லண்டன், கொரியா, பெய்ஜிங், ஜப்பான் போன்ற நாடுகள் வரைச் சென்று நாட்டிற்கும் சமூகத்திற்கும் தமிழ்ப்பள்ளிக்கும் பெருமை சேர்த்த மாணவ அரும்புகளை உருவாக்குவதில் அறிவியல் விழா பெருங் பங்காற்றுகிறது என்று அவர் கூறினார்.

கடந்த ஒன்பது ஆண்டுகளாக நடைபெறும் இந்த அறிவியல் விழாவில் அதன் தோற்றுநர் டாக்டர் முகமது யூனோஸ் முகமது யாசின் பேசுகையில் 2007ஆம் ஆண்டு தொடங்கி இத்திட்டம் தமிழ்ப்பள்ளி மாணவர்களிடையே அறிவியல் ஆர்வத்தையும் ஆய்வு பண்பினை உருவாக்கும் நோக்கம் கொண்டது என்றார் அவர்.

தமிழ்ப்பள்ளிகளுக்கிடையிலான இந்த இளம் ஆய்வாளர்களின் தேசிய அறிவியல் விழா போட்டியில் கெடா, அல்மா தோட்டத் தமிழ்ப்பள்ளி முதலாவதாக வெற்றி பெற்று சாதனைப் படைத்தது. ஜொகூர், தமான் துன் அமீனா தமிழ்ப்பள்ளி இரண்டாவதாக வாகை சூடியது. ஜொகூர், கூலாய் பெசார் தமிழப்பள்ளி மூன்றாவதாக வெற்றி பெற்று பரிசுகளைத் தட்டிச் சென்றார்கள்.

ஒன்பது மாநிலத்தில் இருந்து 60 தமிழ்ப்பள்ளி மாணவர்கள் இந்த இளம் ஆய்வாளர்களின் அறிவியல போட்டியில் கலந்து கொண்டு தங்கள் ஆற்றலை வெளிப்படுத்தினார்கள்.

இந்நிகழ்வில் மைநாடி குழும நிறுவனர் டத்தோ டாக்டர் ஜெயந்திரன், டத்தின்ஸ்ரீ கனகம், டத்தோ ஆ.சோதிநாதன் உட்பட தமிழ்ப்பள்ளிகளின் தலைமையாசிரியர்கள், சமூக அமைப்புகளின் தலைவர்கள் பெற்றோர்களும் கலந்து கொண்டார்கள்.

Perkukuh STEM berjaya tarik minat pelajar – Kamalananthan

JOHOR BAHRU 14 Jun - Kementerian Pendidikan komited mengukuhkan mata pelajaran Sains, Teknologi, Kejuruteraan dan Matematik (STEM) sekali gus mahu lebih ramai pelajar menceburi bidang berkenaan.

Timbalan Menteri Pendidikan, P. Kamalanathan berkata, ini kerana penguasaan pelajar dalam mata pelajaran terbabit didapati amat memberangsangkan.

Menurutnya, sebagai contoh, murid Sekolah Jenis Kebangsaan Tamil (SJKT) Jalan Yahya Awal dan pelajar Sekolah Menengah Kebangsaan Sultan Ismail (SSI) di sini berjaya memenangi pertandingan reka cipta di Korea Selatan, baru-baru ini.

"Hari ini kita sudah boleh nampak bagaimana kita melonjakkan bidang sains di negara ini dan kejayaan mereka itu perlu dijadikan contoh serta diharap ia mampu melonjakkan semangat pelajar lain.

"Jadi, kementerian pendidikan akan terus memberi fokus terhadap STEM," katanya kepada pemberita di sini hari ini.

Terdahulu beliau mengadakan pertemuan dengan pelajar SJKT Jalan Yahya Awal dan SSI yang memenangi pingat emas di *World Invention Innovation* 2015 di Seoul, Korea Selatan pada awal bulan ini.

Pada pertemuan tersebut, pelajar terlibat masing-masing sembilan daripada SJKT Jalan Yahya Awal dan dua daripada SSI mengadakan demonstrasi sekali gus memperkenalkan produk-produk yang dihasilkan mereka.

Kamalanathan berkata, kejayaan pelajar berkenaan juga menunjukkan betapa mereka menguasai bidang sains walaupun masih muda.

Tambahnya, kemenangan pingat emas menerusi empat penciptaan antaranya meja mudah membaca dan botol air dua dalam satu itu juga bukan sahaja mengharumkan nama negara di persada antarbangsa, malah membuktikan pendidikan SJKT negara ini bermutu.

"Terdapat sebanyak 524 buah SJKT di seluruh negara dan apabila orang di luar sana bertanyakan apakah mutu keluaran SJKT, maka, saya boleh jawab, inilah dia pencapaiannya iaitu menang pertandingan reka cipta," katanya.

P. KAMALANANTHAN (tiga dari kanan) bersama tiga murid yang berjaya memenangi pingat emas dalam pertandingan inovasi ketika mengadakan lawatan ke SJKT Jalan Yahya Awal di Johor Bahru, Johor, semalam. - UTUSAN/RAJA JAAFAR ALI


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