

The logo features a stylized 'X' shape formed by four blue spheres connected by orange and black film strips. The spheres are positioned at the ends of the 'X' arms, and the film strips have white sprocket holes.

# Science Film Festival

**Report 2014**

The background of the page features a complex, abstract pattern of overlapping red and white geometric shapes, creating a sense of depth and movement. The pattern consists of various polygons and lines that intersect to form a dynamic, layered effect.

Science Film Festival - The Goethe Institute and ASTI Partnership  
2014 Report

Compiled by:  
SFF 2014 Working Group Committee and ASTI Committee

Produced by:  
ASTI R&D Department

Design, Layout & Editing:  
Ragavan Pandian (Freelance Designer)

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# 1

## Introduction

International Science Film Festival (SFF) is organised across the globe by Goethe Institute in partnership with various local organisations. This year's 4th edition of the Film Festival was organised with added grandeur. More than 400,000 viewers had enjoyed the films presented last year. To make it a success in Malaysia, local partners including Malaysian Nature Society, The German Malaysian Institute, The Ministry of Education, Siemens and Mercedes-Benz were enlisted for this project. The Association of Science Technology and Innovation, ASTI, is proud to be chosen as a partner this year.

In line with a theme chosen for each year, FUTURE TECHNOLOGIES is chosen for 2014. It showcases films coming to screen across the world depicting how the overall future of the world would look like. With time, more and more technologies would dominate our societies - films that show visions of the future have also been chosen this year. The event showcases technology-based films that would have an immediate effect and impact on mankind. The films even emphasize the potential changes as well the opportunities available to the mankind. In fact, some technological concepts in some films may even be mindboggling to the viewers and help foresee the upcoming world dominated with technological achievements.

### 1.1 Science Film Festival 2014

The 2014 Science Film Festival takes us to the future showcasing the technological developments that would shape tomorrow's world. It is quite obvious that the discovery and innovation of science and technology is gaining unprecedented velocity that had never been so in decades of the past. It is obvious from the media which has been injecting new words into our vocabulary such as gentech, nanotech, synthetic biology, graphene, algae fuel, quantum computers and other concepts which used to be the domain of expert researchers but would soon have an impact on our daily lives and on the earth we live in. Future societies have to live adjusting rapidly with the outcome of technological developments, otherwise be left behind.

In such rapidly changing tides, it can be a challenge to keep up with the electrifying scientific and technological developments. What promises and what dangers do these breakthroughs hold in store for us? How are we going to adjust our lifestyle coping up with the envisioned roller-coaster future?

To help make sense of the impending changes in the next ten years and beyond, the Science Film Festival 2014 seeks to explore a broad spectrum of innovative technologies at the cutting edge of science through exemplary films and television contents from around the world. The SFF events, which brings the global technologies in a nutshell, is to be an arena where innovative minds find an opportunity to amaze and brainstorm to shape and adapt to the world that is to be.

## 1.2 Creative & Critical Thinking Camp (CCT Camp)

Young people within the education system today are becoming spectators rather than participants in their own 'learning style'. For instance, overwhelming the learner with the subject's "facts and figures" that they hastily memorize for tests and exams would result in their losing their true understanding of the subject matter which eventually becomes irrelevant and inconsistent to their life. It should be argued that real education must help create a creative and critical mind by empowering the learner to take charge of his/her education. It must also be emphasized that rote learning would no way help the learners gain deep understanding of what they do. Subjects and lessons are mere tools to nurture and tease the brain for independent thinking. Thus, any subject in the sciences or arts is able to create this ultimate positive impact, 'if designed and delivered' properly.

In CCT, participants are introduced to creative & critical thinking, and logical & empirical reasoning to solve problems, using competitive & collaborative methods of producing outcomes via fun activities in a "camp" based environment. CCT hopes to transform the student into a true learner. It aims to give the responsibility of learning back to the learner. This camp is mainly coordinated by a team of experts and activists, who have extensive experience in the fields of Science, Technology and Innovation, as well as adaptive Youth Engagement.



## **The Collaboration**

In conjunction with the Science Film Festival Malaysia 2014, ASTI was involved in 3 different initiatives; two organized by Goethe-Institute and one by ASTI. The 3 events were: namely the Opening Ceremony, Distribution of SFF School Packs and the Science Film Festival Creative and Critical Thinking, SFF-CCT Workshops.

SFF-MALAYSIA 2014 prepared about 700 packs to be distributed to schools and education institutions across the country. The packs were made up of 4 DVDs containing 30 films for all ages (including children). The packs also contained other 'goodies' such as T-shirt, SFF 2014 Booklet, writing / scribbling pads, etc. ASTI's President was one of the pre-jury team members, who helped select the films for SFF-Malaysia 2014. The 30 films were selected from a list of over 80 pre-selected films.

### **2.1 Objectives**

The objectives of SFF-CCT include:

- To introduce young people to Science and Technology
- To help young people to develop creative and critical thinking capabilities
- To develop modules and content for SFF-CCT which are effective on delivering the above
- To introduce and encourage young people to view films and documentaries as a medium for effective learning - in an interesting way.



## 2.2 SFF-CCT Format

One of the areas covered in the full 3-day CCT camp organised by ASTI are modules on watching films and understanding what was shown. They were asked to watch in a critical manner. In conjunction with the Science Film Festival, ASTI developed and expanded one of the original modules of CCT related to “Watching Films Critically” as well as developed new modules related to the subjects of the films chosen. It was then used to run a full-day workshop for youths. The aim was to encourage and instil a sense of critical and creative thinking when watching the thirty carefully chosen SFF-Malaysia films.

The participants were divided into groups to share and learn amongst themselves via discussions and conversations on their own. The selected films have a double effect; highlighting both the science aspect of the film and the learning experience of the participant. Thus, the watchers have the freedom of both witnessing the development of technology and learning what it is. The adapted modules can be run for either half-a-day or a full-day depending on the requirements.

One film was chosen for a half-a-day workshop at the tertiary level (> 19 years old) and five films chosen for a full-day workshop for the secondary level (14-17 age group). Before each of the films, the trainer would give a short seminar on the central ideas relating to the films, i.e. Science and Technology.



# 3

## SFF-CCT Promotion

A brochure was prepared for circulation / distribution on SFF-CCT. (See Appendix 1 for more information). The next subsection shows some of the places where SFF-CCT was publicized.

### 3.1 Young Inventors Challenge (YIC)

YIC is an annual event organised by ASTI. A booth advertising bunting and posters was set up in the foyer at the ASTI-YIC 2014 event. The YIC committee allocated a booth to promote SFF. The participants were given the opportunity to watch the science films of past years as part of the promo for the 2014 Festival. Interested team members were encouraged to sign-up to attend the SFF-CCT scheduled on 8 November. In addition, the mentors and teachers who accompanied the teams were requested to sign up if they wanted a “School Pack” with 30 films to be sent to their schools. The opening ceremony date was also promoted at this time, but the emphasis was on the SFF-CCT and the School Packs.

### 3.2 National Science Fair for Young Children (SFYC)

Science Fair for Young Children is a series of Science Fair organised across the country by ASTI collaborating with other organisations. The SFYC committee gave SFF a booth for promotion. The booth was set up in the foyer of the SFYC National event. Notepads and pens were distributed to interested parents and teachers accompanying the teams. Application forms were issued as part of the promotion to schools across the country. Teachers attending also signed up for School Packs intending to participate in the national event.

### 3.3 ASTI Internal Promotion

The information on SFF Malaysia 2014 and SFF-CCT was included in the ASTI monthly newsletter – which was circulated to all ASTI members and friends in the mailing list. It was also posted on the ASTI Website and Facebook Page. The event was also included as part of the discussions during CCT 2014 meetings and preparations. The usual media contacts of ASTI were informed of the Opening Ceremony and were requested to attend.





## 4

### **SFF Opening Ceremony**

Three persons represented ASTI at the launch of the SFF Malaysia 2014 on the 16th of October 2014, at the GSC Cinema, Pavillion. Three short films were shown during the event. A table was set up displaying information on ASTI and the SFF-CCT. ASTI was represented at the press conference by Ms. Helen Ng, committee member of the CCT Camp and ASTI liaisons coordinator for ASTI to SFF. The invited students and their teachers were informed of the SFF-CCT workshop being organized. Their contact details were obtained for follow-up.

## 5

### **Distribution Of School Packs**

ASTI posted 100 sets of SFF School Packs to various primary and secondary schools across the country. The schools and institutions chosen were from the winning teams of SFYC (23), the schools which participated in the YIC (44), the schools whose students participated in SFF-CCT Workshop (14), Chinese Secondary Schools (13) and the remaining (6) other institutions connected with ASTI, including KDU. A cover letter from ASTI requesting the schools to use the films as a teaching aid was included in each pack. The postage was funded by Goethe-Institute.



## **The Science Film Festival-Creative And Critical Thinking, SFF-CCT Workshops**

ASTI held two separate SFF-CCT workshops; the first for selected students of KDU PJ Campus and the second for secondary school students. Two different types of workshops were developed to appeal to the different audiences.

### **6.1 SFF-CCT Workshop – In the KDU**

The half-day workshop was held on 29 October at the KDU Campus in Petaling Jaya. The focus of the workshop centred on an award-winning film on “Logical Thinking” called “The Joy of Logic” by BBC, aimed at introducing people to “logical thinking” and its relevance to day-to-day life. The workshop was interactive and it included activities related to logic. The participants were Year-1 and Year-2 law students. The workshop focussed on raising awareness and introducing logical thinking method and how it is used in their daily lives.

The ‘Joy of Logic’ was shown in 3 parts:

- 9.30 am - Arrival
- 10.00am - Logical Thinking - An Introduction followed by watching the first part of the film then discussion.
- 11.30am - Tea-Break
- 11.45am - Logical Thinking Part 2 (followed by discussion & Activity)
- 12.45pm - Logical Thinking Part 3 (followed by discussion & Activity)
- 1.45pm - Round up

For more information on the film shown, see Appendix 2.





## 6.2 SFF-CCT Workshop Grand Pacific and Khazanah

The second workshop was held on 8 November 2014 for 42 secondary school participants, the majority of which came from various schools in the Klang Valley area, with a small group coming from Johor. The workshop went on for the whole day.

A total of 4+1 films of various lengths and with different themes were shown. After the introduction and ice-breaking activities, the students were given a 90-minute seminar introducing them to science and technology. This was to help them get into the right frame of mind before watching the films. Various activities and experiments were designed to help them understand science and technology better using the 'hands-on' method.

The films were chosen based on the story they had told and the lessons they had delivered. See Appendix 2 for summaries of the film.

The films chosen were:

- **Microhydro – A Drop for Light** - The first film was about "Intermediary Technology" which is a technology that combines complex ideas and methods with cheap and readily available materials. This type of technology is used mostly in developing countries where there is a lack of technology in their daily lives. It shows how people with little access to technology live and how just a little and simple technology can go a long way in helping people. It also shows how this technology which we take for granted can make a huge difference in these people's lives.
- **Nine-and-a-Half: A Life Without Plastic** - The second film was set in a modern developed country. It shows how dependent we have become on technology. In modern society, we have become almost entirely dependent on technology as it has become an almost irreversible way a life. The film is in sharp contrast to the previous one. The first is set in a society with little technology showing how just a little addition can make a huge difference. The second is set in a society with a lot of technology showing how to remove even a 'little' technology can make a huge difference to this society.
- **Quarks & Co: The Robots Are Coming** - The third film is about modern or most advanced technologies showing robots and how almost any type of activities that humans do can be outsourced to a robot. This film was to show the current achievements and advancements at the forefront of technology and how it has advanced and taken over roles in society. The film is to give the participants an up-to-date status on the technologies and how our lives are changing now.





- **Tomorrow's World: A Horizon Special** - The fourth film is focused mainly on the future. The focus centres on future technology and future methods of research and development towards inventions and innovations. The film shows some case studies to show the young participants some insightful ideas into the future. The film guides them to participate in the development of science and technology in the future. The film further goes on to trigger the minds of the young on how to align themselves with the fast-changing world of science and technology.
- **Cellulomania** - The fifth film was only shown at the workshop in Grand Pacific since it has a very creative way of presenting the ideas. The film includes emphasizing some of the ethical elements of mankind progressing in Science and Technology.

After each of the films, a short presentation and discussions ensued. Some brainstorming activities were also designed after each film.

Below is the programme or agenda for the full-day workshop, as shown below:

### The programme

Now Showing: SFF-CCT

9.00 am	Doors Open
9.00 am - 9.45 am	Tickets and Breakfast
9.45 am - 10.00 am	Dim the Lights (Take Seats)
10.00 am - 10.30 am	Lights, Camera, Action (Ice breaker)
10.30 am - 12.15 pm	Raise the Curtain (Screening 1)
12.30 pm - 1.15 pm	Interlude
1.30 pm - 2.30 pm	Noon session Show (Screening 2)
2.30 pm - 3.00 pm	seeing is Believing (Screening 3)
3.00 pm - 3.15 pm	Popcorn Break
3.15 pm - 4.30 pm	Moving Picture Screen (Screening 4 part 1) (Screening 4 part 2)
4.30pm - 5.00 pm	Curtain Roll Down / Applause (Cert. Presentation)

The event in Khazanah was held at their office at Level 33, Petronas Twin Tower.

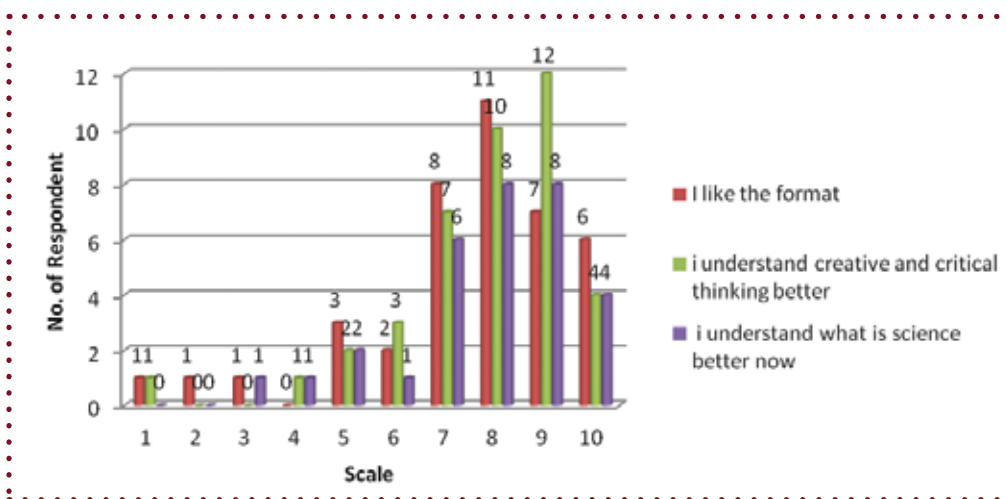
For both programmes, ASTI was honoured to host a distinguished professional with avid experience in the oil and gas industry from the Sultanate of Oman, Mr Mohamed Al-Harthy, who was an amazing motivation speaker, presenting his speech at the end of the event ingesting greater confidence into the participants so as to continue with their learning in Science and Technology. Please find his feedback of the events in Appendix 3.

# 7

## Result Of Survey Conducted At SFF-CCT

### 7.1 Result of SFF-CCT Grand Pacific

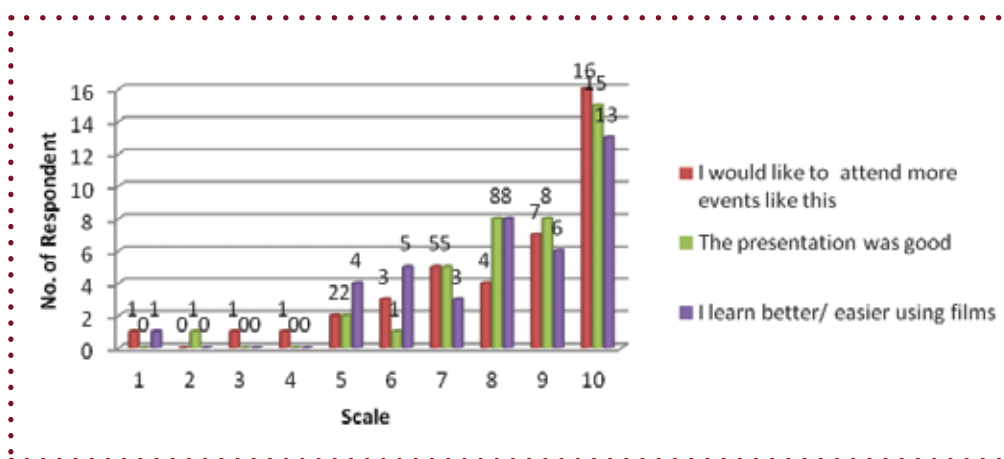
Below is the result of the survey from the participants of the event carried out at Grand Pacific. The scale used was 1-10; 1 being “disagree very much”, and 10 being “agree strongly”.



The format of the event was carefully designed to make it easy for better understanding among the participants. The participants were given a free hand to counter-comment on matters discussed. The organizers took greater interest in making the event lively to all participants. Eventually, they had to spin it ingesting more interesting intersections that would help to arrest the interest and hold the participants to their full spirit. As expected, the goal of keeping the participants in full focus was achieved by the positive and affirmative responses. The respondents said that they liked the format (80% with marks 7 and above).

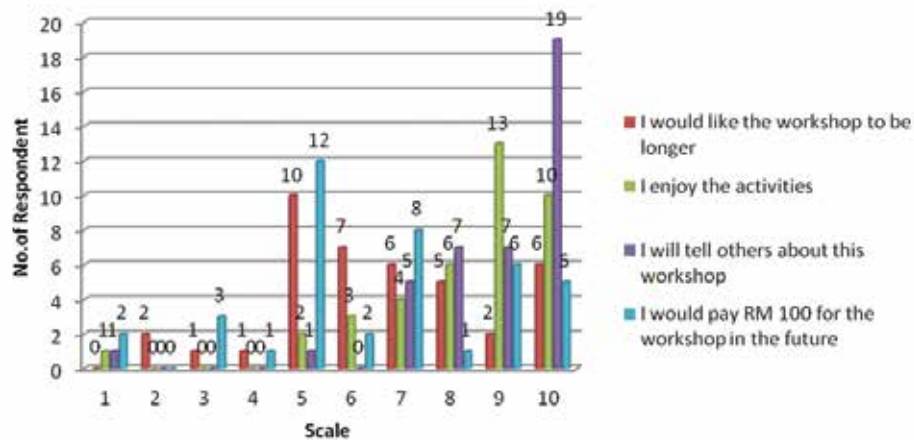
Events are not just to enjoy and pass the time. Any event without any positive output is nothing but a routine passage of time. However, this event could capture the interest of the young participants and was able to hold them in full attention throughout the length of the workshop. They agreed that the workshop was able to help them understand science better. The event was successfully able to tease them to trigger creative and critical thinking attitudes. Innovation was hatched out from critical and creative thinking, in line with what the young participants had learned working with and understanding science. More than 80% (marks and above) said that they understood creative and critical thinking better after the workshop.

Science dwells in the day-to-day life of everyone. Though learning is divided as science and non-science, science plays a significant role in our modern living environment. Additionally, the world is constantly looking forward to receiving more and more innovative appliances to intervene in our living system. Anyone understanding science better would be helped to lead to a successful life. Part of our motive is to make the young participants more inclined towards science-oriented thinking. The response in understanding science is promising: about 80% said they understood science better (marks 7 and above). However, we did notice that not all participants filled this question of the survey.



The entire segments of the event have impressed the participants to respond very positively. It has given the organizer the indication that the event's methodology was a success. This kind of response also gives us an indication that the younger generation would show keen interest in science and technological subjects if delivered properly in a 'fun' way. 80% of the respondents gave a mark of 7 or higher stating that they would attend more events such as these, whilst 90% gave a mark of 7 and above for the presentation being good.

The careful choosing and screening of the presentations in between helped to make the subject more interesting and easier to understand. Presentation does matter in any show. Presentation is the key part playing a significant role in making the audience focussed for a full-day. Taking into account and reading the response of the young, 75% of the respondents said that they learnt better with films (more of 7 and above).



The participants had a free hand of learning for themselves during the workshops. The learning part was well-taken and absorbed by all participants. Individual assistance was provided to each participant in his or her learning process.

The activities were core part of the workshop. They were well-received by all the participants with 23 participants giving it a mark of 9-10 and a further 10 participants giving it a mark of 7-8 (85% participants gave the activities a mark of above 7). The carefully chosen activities were a dossier to the knowledge bank of the part-takers. The organizers could find the participants working with focussed attention during the activities.

Word of mouth propaganda is the best of all dissipation of information. The entire strength of the attendees seemed to have registered their response in spreading the events core knowledge base to others. It was an amazing response, which was indicative of their full satisfaction. It was a kind of knowledge thrill that deserved disseminating to others regardless of the age groups. Almost half of the participants gave a 10 out of 10 mark for the question if they would tell others about the event, whilst 95% gave marks of 7 or higher.

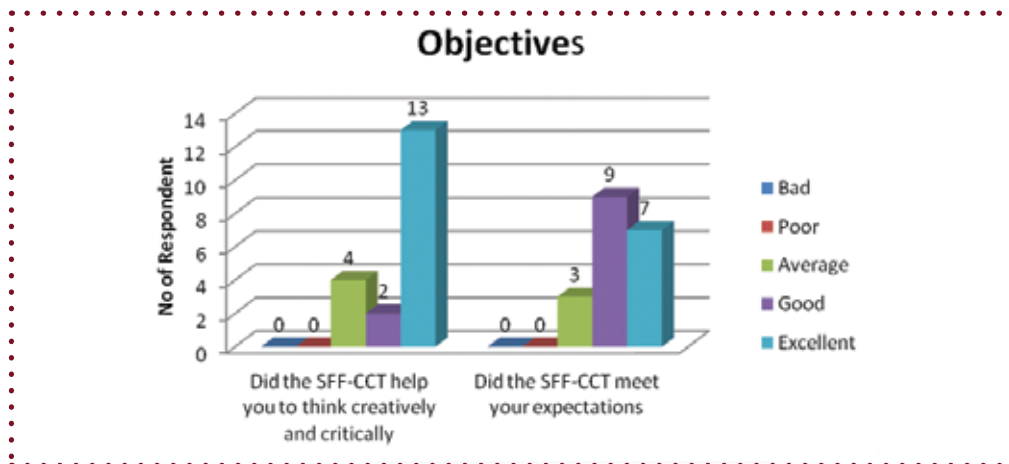
The questionnaire included a question on the financial commitment they might likely to consider for the event as a nominal fee. Almost three quarters of the respondents have affirmatively responded saying it was fair to fix RM100 and they would not mind paying the fees. Considering that the participants' average age was 16, this response is quite positive.

Thus, a majority of the participants showed a positive response to SFF-CCT and said that they enjoyed the event. They also agreed that they learned much from the films and found using films as a method of learning very useful. The respondents also indicated that the length of the workshop was acceptably optimal as a one-day event. However, the participants were not that enthusiastic about paying for such an event.

We also noticed that one participant consistently gave a low mark on our survey. We think that part of the reason was the participant's ability to understand English. In the future, we feel that the programme may also be run in Malay, where possible, or to make sure that the participants have a minimal ability in English before participating in such events.

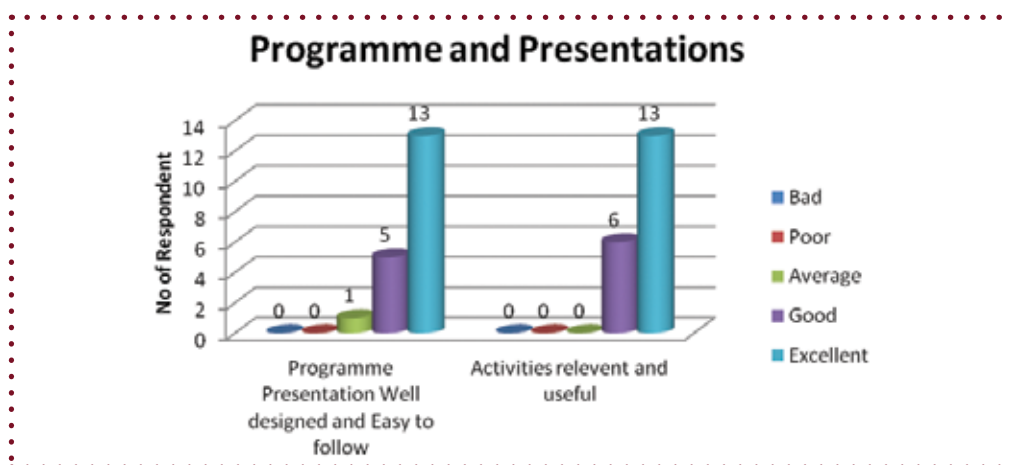
## 7.2 Result of SFF-CCT Khazanah

Based on the result obtained from the survey at Grand Pacific, an improved survey was design and conducted for participants in SFF-CCT Khazanah. The following chart shows the results. The scales used were 1 - 5, one being bad and 5 being excellent.



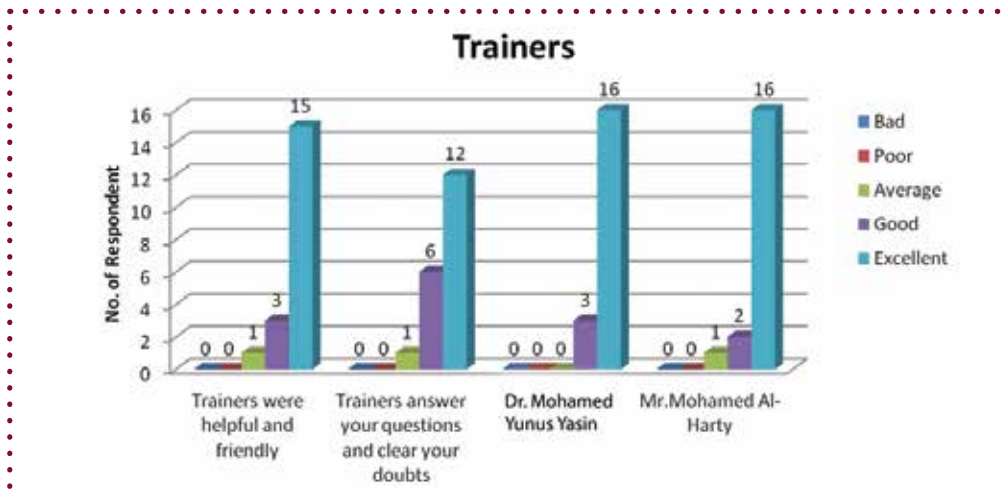
The core objective for the part of the science films has been well-achieved and it is obvious from the score achieved. Thirteen out of nineteen respondents responded with the highest mark saying that the event helped them think in a creative and critical manner.

At the beginning of the workshop, the participants were asked what their expectations for the event were. At the end, during the survey, sixteen out of nineteen respondents chose to respond very favourably when they were asked if the events had met their expectations. It was indicative of their interest and inclination towards science and technology when delivered in a fun and interactive manner.



The design of the programme is the core of the event. The organizers have learned from their many stakeholders during the module development. Thirteen (almost 70%) respondents said that the programme was designed and presented in an excellent manner, whilst another 5 said that it was good. They confirmed that it was easy to follow, indicating the pace of the workshop was optimal.

ASTI believes that learning process must include a “hands-on” manner of learning. Again, thirteen (almost 70%) said that the activities were excellent, relevant and helped with their learning process, whilst 6 said that it was good.



When training the trainees, there should be a congenial environment present in the training venue. A strict teacher-pupils method may not achieve the expected learning outcome. ASTI’s approach of training is a “friend-to-friend” approach which it finds effective and constructive. The same criterion was followed in this event, and fifteen out of nineteen participants very favourably responded and acknowledged trainers’ friendly approach.

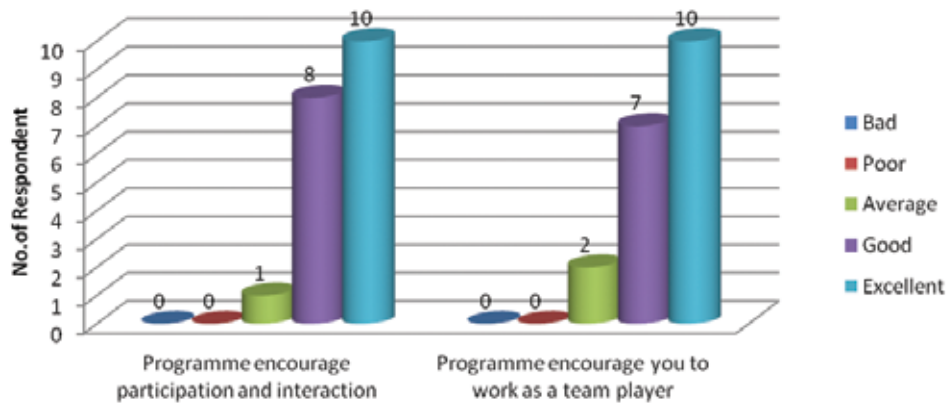
Interactive elements are important to any workshop where doubts are cleared as they arise and not kept until the end of the event. The trainers should equip themselves to answer the questions at the end and during each segment. The trainers were successful in achieving this objective.

Dr Mohamed Yunus Yasin was responsible for developing the modules and delivering them to the participants. His presentation was highly accepted by the participants as seen from the high marks achieved.

Though Mr Mohamed Al Harty was a foreign speaker, he knew the magic of putting ideas nicely into the mind of the attendees. With a long chain of honorary positions held over in the Middle East and elsewhere, he did a wonderful job in defining the need of science and technology for the younger generations for them to be successful in the future.

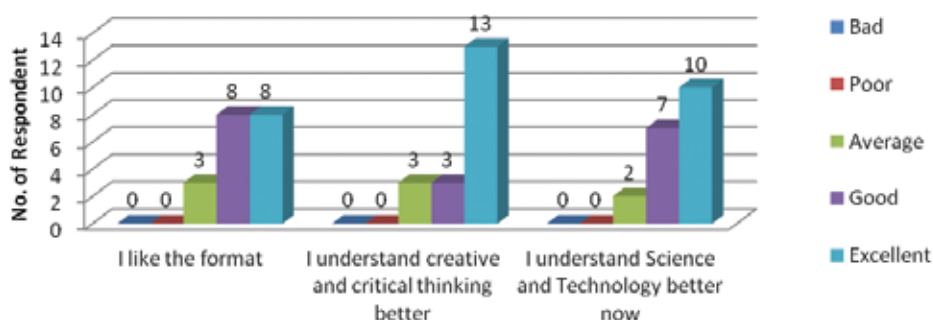


### Participation, Interaction and Teamwork



The programme also encouraged the participants' participation in their own learning. Any programme, especially for the young, should aim at encouraging interest in participation and teamwork. The degree of achievement by teamwork is much greater than that of any individual. The workshop participants were divided into 4 teams where they learnt as a team. Combined efforts always prove more effective. Bearing this in mind, the thread of the programme was to ingest the fruits of teamwork, and we found the participants learned and utilised the idea of learning as a team. Seventeen out of nineteen respondents favourably responded to this effect.

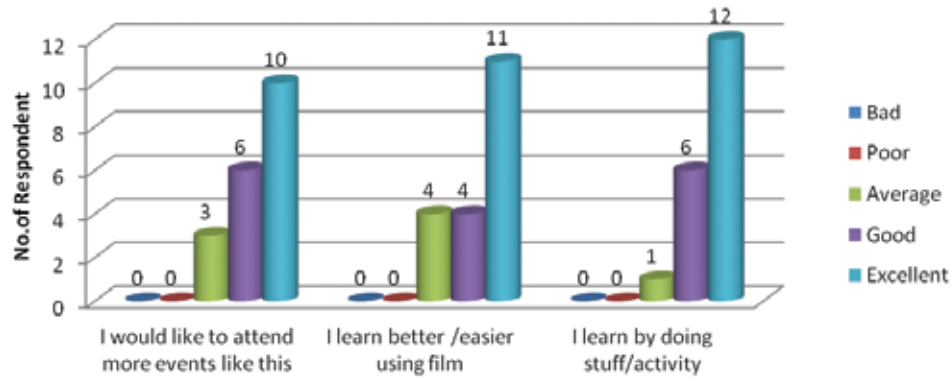
### Format and Understanding of the workshop



The sequence of events and the way they were presented was one of the main causes for the programme proving successful. Sixteen responded positively to the format of the workshop.

The participants also said that they were able to understand creative and critical thinking via the workshop. The same positive response was also noticed in their understanding of science and technology.

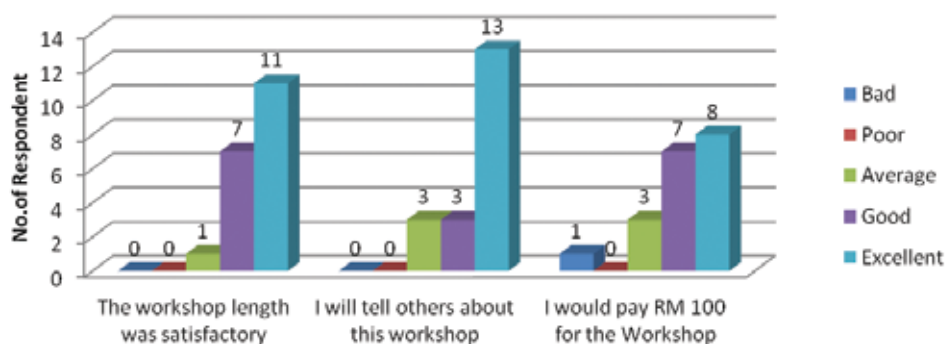
### Learning from the Workshop



Sixteen out of nineteen participants expressed interest in attending more events such as SFF-CCT. Eleven indicated that they learnt very well using films, whilst another 4 indicated that they learnt well.

Involving or carrying out an activity gives greater insight into what is done. When participants are allowed to learn on their own, they get a deeper understanding imprinted into their mind. They become familiar with doing things rather than just reading or watching it. This workshop paved way to the young participants to familiarise with simple day-to-day living science as almost 100 percent said that they learnt well from activities.

### Satisfaction of the Workshop



An event may have a few programmes in fold and each of them may differ from the other in presenting the core idea. Each programme needs to be scaled appropriately to augment the interest of the participants. The consistency and overlapping of the segments in the event were timed appropriately to receive a positive response from eighteen of the workshop attendees.

The success of the workshop can be measured by people speaking about it after the event. Almost all responded positively saying that they would tell others about it.

As part of financial relevance, each participant was asked the question to help fix a fair price for the workshop in the future. More than half of the strength of the participants agreed to a reasonable price of RM100 as the registration fee for the programme. Again, considering the age of the participants, we feel that this is a positive result.

### **7.3 Survey Conclusions**

We noticed that the objective of SFF-CCT was met saying that they were able to think more creatively and critically. Participants were also able to understand science and technology better after the workshop. However, we did notice that there were a couple of participants who had problems with the English language. Yet, they were able to follow and grasp the central idea of the event due to interactive and cohesive nature of the programme. The participants were overwhelmingly happy with the unique presentation and the chain of activities of the workshop.

The trainers were also judged to be excellent by the participants and were seen as facilitators in the participants own learning process. We feel that the programme was a success and achieved its objectives and hope to organise more in the future.



# 8

## Profile of Trainers

The liaison officer of the programmes was Ms Helen Ng, with CCT administration assisted by Ms Umahsankariah and Ms Vanitha from ASTI secretariat. The trainers for SFF-CCT were Dr Mohamed Yunus Yasin and a special guest motivational speaker from the Sultanate of Oman, Mr. Mohamed Al-Harthy for the event at Grand Pacific and Khazanah. The list of profiles of the trainers is as follows:

### 8.1 Dr Mohamed Yunus Yasin

- President of ASTI & Content Developer for SFF-CCT

Obtained his PhD in Chemical Engineering from the University of Cambridge, UK, in 2002 with over 15 years of experience in environmental policy, Sustainable Development and Education. Conducted trainings in professional organisations, universities and NGOs locally and internationally. He also helped start up over 9 companies and initiatives and over 12 NGOs, civil society groups and non-profit projects. He has worked for Khazanah Nasional, Malaysian Environmental NGOs (MENGOs), Environmental Protection Society Malaysian (EPSM), Danida and many others.

### 8.2 Mohamed Al-Harthy:

- Former Chief Executive Officer (CEO) at Oman Society for Petroleum Services [OPAL]

Over 30 years of experience in oil and gas business: upstream exploration and production, operations, strategy and leadership. Grown up in a highly active Petroleum Development Oman and Shell Exploration and Production environment. Known as a people-caring person and as an explorer with a passion for geology. Started in operational support and developed through stratigraphic services and interpretation to several leadership positions: Former Head Staff development planner in exploration, Team leader - Near Field and Shallow Oil Exploration, Gas Exploration Manager. Participated as presenter, committee member and chair in a number of conferences and professional workshops: Middle East Geoscience conferences and exhibitions 2004,2006,2008; International Petroleum Technology Conference (IPTC) Doha-Qatar 2006 & 2009; IPTC- Dubai-UAE 2007; AAPG Committee for Unconventional Resources Geosciences Technology Workshop, Istanbul, Turkey, July 2009. Technical Committee/Chair Geo2010 "Meeting the Energy Challenge in Changing Times" conference March 2010. On Organizing Committee of Assessment of Unconventional Gas Resources AAPG GTW, Istanbul, Turkey May 2010. A keynote speaker at the Arabian Society of Human Resources Management (ASHRM) Dec 2011. Member of the steering committee - Gas Arab Summit, Muscat-Oman, Dec 2012 and session chair of Unconventional Resources from Potential to Practice and In-Country Value. On Steering Committee, panel chair and presenter 2014 HSE Forum: Crisis Management and Emergency Response; Grand Hayyatt Muscat, 24th-25th Sept 2014. Delivered the Official Key Address at the #Second EAGE Forum for Students & Young Professionals Empowering & Developing Young Talents, at SQU University 2014. On the advisory board and Chair of "The Offshore Development Conference 2014". Specialties: Oil and Gas expert, Exploration, Petroleum Geology, Oman Petroleum Geology, Geosciences Staff Development in Oil and Gas Industry, In-Country Value (ICV)/Local Content.

# 9

## Overall Conclusions

The collaboration of Goethe institute and ASTI is seen as a big success and we hope for better cooperation in the future. Considering the limited time frame, ASTI was able to develop several modules based on the films received. It is recommended that the planning for the event be done earlier in order to maximise the benefits for all stakeholders. SFF-CCT, based on our survey, is a big success and more events such as this could be organised in the future. ASTI also recommends that relevant events be continued throughout 2015 until the next SFF. Taking into account of the survey results, the programme seemed to have sent waves of awareness on the fields of science and technology to all participants in general and, the young in particular. The event can be said to be an innovative programme and an effective tool to educate young minds. Turning young people more towards science and technology is positive sign of progress and would be of net worth for the nation's development futures. The younger generation, being the pillars of the nation in the future, they well deserve good and well designed activities that will sharpen their thinking towards more creative and critical thinking to be more productive members of society.





KELUAR



ASSOCIATION OF SCIENCE, TECHNOLOGY & INNOVATION

# What Do We Do?

Raising Awareness,  
and Training

Conceptualise, Design  
Implementation





# 10

## Budget

SFF - CCT Budget RM 8,500		
No	Item	RM
1	Transport Petrol /Taxi /parking /toll	200.00
2	Printing / photocopying / Stationary	200.00
3	Venue	2500.00
4	Activity Items	300.00
5	Volunteer SF- CCT organising allowance	500.00
6	ASTI module development	2500.00
7	Trainer	1000.00
8	Secretariat / Admin	1300.00
<b>TOTAL</b>		<b>8500.00</b>

SFF - SCHOOL PACKS - Budget RM 300		
No	Item	RM
1	Postage 200x2	200.00
2	Volunteer Mailing List & Postage	100.00
<b>TOTAL</b>		<b>300.00</b>

Please note that not all the secretarial cost is shown in this budget as it was absorbed by ASTI.

## APPENDIX 1: The Brochure



PENTURBAMAN SAINS, TEKNOLOGI DAN INOVASI  
(PENTASI) 2014/2015  
ASSOCIATION OF SCIENCE, TECHNOLOGY  
AND INNOVATION (ASTI)  
  
ADDRESS:  
NO 16A, JALAN 2012,  
SEKAPARK  
46000 PETALING JAYA  
SILANGOR

**ASTI**, in conjunction with the **Science Film Festival 2014**, is holding a 1-day event to highlight how to think **Creatively and Critically** in your daily lives using **Award Winning** films from around the world. It is open to the **Youth in Malaysia** aged between 15–18 years old. A 'Certificate of Participation' will be awarded to all who attend.

The **SFF-CCT Workshop** will be conducted by **Dr Mohamed Yunus Mohamed Yasin**, who graduated with a PhD in Chemical Engineering from the University of Cambridge, U.K with a full scholarship from the Ministry of Science, Malaysia and Corpus Christi College, Cambridge. He won 3 awards related to Entrepreneurship organised by the British Biological Science Research Council and Cambridge University. He was a career advisor on Science and Technology at the Alternative Careers Fair 2001, both at Cambridge and Oxford University and organised a conference on "Water Futures" at Imperial College, London.

Since graduating he has been working in the area of Sustainable Development, Business Development, Community Advancement and Education. Conducted training on Climate Change, Environment, Ethics, Social Enterprise, Critical Thinking and Conflict Resolution for the Youths in over 5 countries. Helped start up over 8 companies and over 10 NGOs, civil society groups and non-profit projects including projects such as the Science Fair for Young Children, Young Inventors Challenge, Creative and Critical Thinking Camp. He is a life-time member of the Cambridge Philosophical Society and also the Founding President of Association of Science, Technology and Innovation, ASTI.

If you would like to participate in this unique event, please fill-in the attached form and pass it to the ASTI representative or Email to: [asti2510@gmail.com](mailto:asti2510@gmail.com) or Fax to: 03 78778571  
Attention: Ms Umah.




ASSOCIATION OF SCIENCE, TECHNOLOGY & INNOVATION



[www.sciencefilmfestival.org](http://www.sciencefilmfestival.org)




**SFF - CCT Workshop**  
9am—5pm  
Saturday  
8 November 2014  
  
Grand Pacific Hotel  
Jln Tun Ismail  
Kuala Lumpur



**Theme 2014 -**  
**FUTURE TECHNOLOGIES**

In 2014, the Science Film Festival turns to the future and showcases the technologies that will shape tomorrow's world. Scientific discovery and technological innovation are accelerating at an unprecedented speed and the media is constantly injecting our vocabulary with new words such as genotech, nanotech, synthetic biology, graphene, algae fuel, quantum computers and other concepts, which used to be the domain of expert researchers but are soon to have an impact on our daily lives and the world we live in.

In such rapidly changing times it can be a challenge to keep up with the exciting scientific and technological developments. What promises and what dangers do these breakthroughs hold in store for us? To help make sense of the impending changes we can expect in the next ten years and beyond, the Science Film Festival seeks to explore the broad spectrum of innovative technologies at the cutting edge of science through exemplary film and television content from around the world and numerous activities at the international event.



**Creative & Critical Thinking Camp (CCT)**

Young people within the education system today have become spectators rather than participants in their own 'learning futures'. For instance, this is done, by overwhelming them with the subject's "facts and figures" which they memorise for tests and exams and soon forget after the fact! It should be argued that real education must help created a creative and critical mind by empowering the learner to take charge of his/her education. Subjects and Topics are mere tools to nurture this new independent thinking mind. Thus any subject in science or arts is able to create this ultimate goal if 'delivered' properly.

Participants are introduced to creative & critical thinking, logical & empirical reasoning to solve problems, and competitive & collaborative methods of producing an outcome via fun activities in a "camp" environment. This camp is mainly coordinated by a team of experts and activists, who have extensive experience in the field of Science, Technology and Innovation as well as Youth Engagement.

**SFF—CCT 2014  
REGISTRATION FORM  
CLOSING DATE 28 OCT 2014**

NAME \_\_\_\_\_ AGE \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

SCHOOL NAME \_\_\_\_\_

SCIENCE TEACHER'S NAME \_\_\_\_\_

PARENT'S / GUARDIAN'S NAME \_\_\_\_\_

PARENT'S / GUARDIAN'S CONTACT No. \_\_\_\_\_

PARENT'S / GUARDIAN'S EMAIL \_\_\_\_\_

PARENT'S / GUARDIAN'S SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

FOR OFFICIAL USE ONLY

## APPENDIX 2 : The Films Chosen for SFF- CCT

Title:	The Joy of Logic
Director:	Catherine Gale
Produced by:	BBC
Running Time:	60 minutes
Country:	UK
Year:	2013
Age Guideline:	16+

This BBC production is a sharp, witty, mind-expanding and exuberant foray into the world of logic with computer scientist Dave Cliff. Following in the footsteps of the award-winning The Joy of Stats and its sequel, Tails You Win – The Science of Chance, The Joy of Logic takes viewers on a new BBC Four roller-coaster ride through philosophy, maths, science and technology all of which, under the bonnet, run on logic. The film journeys from Aristotle to Alice in Wonderland and Sci-Fi to supercomputers to tell the fascinating story of the quest for certainty and the fundamentals of sound reasoning itself.



Title:	Microhydro – A Drop for Light
Original Title:	Mikrohidro Setetes Untuk Terang
Director:	Anjas Prawioko
Produced by:	Adelia Devita
Running Time:	24 minutes
Country:	Indonesia
Year:	2013
Age Guideline:	12-16

Electricity has already changed our way of life over the past century in many positive ways, but now the demand for electricity is rapidly increasing while resources are depleting. Indonesia has extensive potential for water as a resource. The Kombongan community have taken the initiative into their own hands and have built a micro-hydro power plant along a nearby river. Now they have access to electricity to improve their living conditions.

Title:	Nine-and-a-Half: A Life Without Plastic
Original Title:	neuneinhalb: Bioplastik
Director:	Nina Lindlahr
Produced by:	vision gmbh im Auftrag des WDR
Running Time:	10 minutes
Country:	Germany
Year:	2012
Age Guideline:	12-16

It's virtually impossible not to use any plastic in everyday life. From toothbrushes to CDs and even to some clothes in our wardrobe – plastic is in almost everything that we use on a daily basis. That's no wonder, it is relatively inexpensive and practical, but it can be harmful to our health and to the environment. Johannes is therefore daring himself to an experiment: he wants to find out whether he can live without any plastic products whatsoever. What things will he have to remove from his home and where will he find non-plastic alternatives? All this and more you can find in this episode of Nine-and-a-Half.

Nine-and-a-Half is a programme airing on the German public broadcaster ARD and the children's channel KiKa, which explains the issues behind the headlines covering social and political issues, as well as science and technology themes.



Title:	Quarks & Co: The Robots Are Coming
Original Title:	Quarks & Co: Die Roboter kommen
Director:	Wolfgang Lemme
Produced by:	Westdeutscher Rundfunk (WDR)
Running Time:	43 minutes (only the first 11 minutes shown)
Country:	Germany
Year:	2013
Age Guideline:	12-16

Robots fulfil duties around the house and in the garden. They assist in elderly care and fight our wars. Science fiction or reality? While we can already buy lawn-moving robots and autonomous vacuum cleaners, synthetic caretakers and soldiers are not yet part of our everyday lives. Not yet! However, scientists around the world are working on developing such machines.

In this episode of Quarks & Co. we meet these companions of the future and shows what they might look like and why it is so difficult to make them perform even simple tasks like walking. The programme also examines why robots seem to be more socially acceptable in Asia than in Europe and introduces one of the most human-like robots in existence today.

Title: Tomorrow's World: A Horizon Special  
Director: Graham Strong  
Produced By: Graham Strong / BBC  
Running Time: 60 minutes  
Country: UK  
Year: 2013  
Age Guideline: 12-16

This film delves in to the world of invention, revealing the people and technologies set to transform all our lives. By meeting some of the world's foremost visionaries, mavericks and dreamers the film examines the conditions that are promising to make the 21st century a golden age of innovation. From entrepreneurs that are driving a new space race to the Nobel Prize winning scientist leading a nanotech revolution, this is a tour of the people and ideas delivering the world of tomorrow, today.



Title: Cellulomania  
Director: 14 children  
Produced by: Jean-Luc Slock (Camera-etc)  
Running Time: 6 minutes  
Country: Belgium  
Year: 2009  
Age Guideline: 6-10

In this whimsical animated short film, 14 children revisit funny and fancy theories of evolution according to Darwin for a light-hearted look at science interpreted through youthful imagination.





### **APPENDIX 3 : Feedback from Mr. Mohamed Al-Harthy after the Khazanah event.**

Dear Brother Dr Yunus,

Thank you very much for your kind invitation and welcome to the ASTI event, yesterday. I thoroughly enjoyed the event and the pleasant atmosphere. The time spent with the young boys and girls was worth it: they were attentive and interactive during my talk. Equally important, the side discussions during the tea/coffee breaks were excellent as they focused on addressing issues related to them. Questions discussed ranged from what subject should I focus on before college? What discipline should I take at university? I am confused; I really don't know what I want! How can I choose? Is it better for me to study science, art or business? Which carrier path should I take? How can I build my confidence?

Throughout the workshop and during the conversations, I noticed a high level of respect among the students. They were very polite and respectful; something that we should not take for granted.

Please pass on my sincere appreciation to "The Perfect Gentleman", Director Imran Ahmed of Khazanah National and the staff who were very welcoming. I salute their initiative and their proactive role in supporting extra curriculum activities to enhance the standard of education and awareness between the student and young generation.

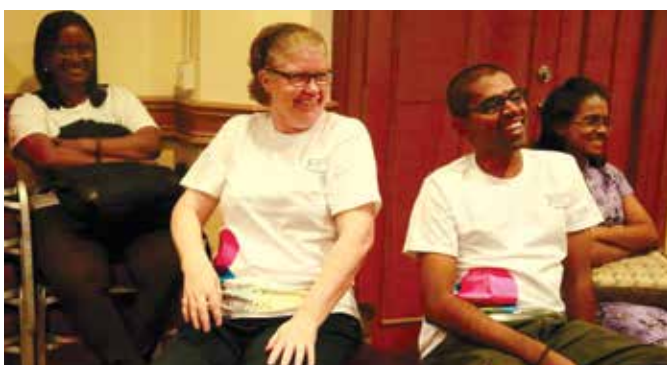
To follow up on our yesterday discussion, yes! I will be happy to continue supporting ASTI in its noble mission on promoting Science, Technology and Innovation, which are critical ingredient for progress in our model life. It goes without saying that the above must be reinforced by the common fundamentals of human behaviours and business ethics like respecting intellectual rights, integrity, teamwork and corporation.

Best regards,

Mohamed Al-Harthy,

P.S. We welcome Mr Mohamed Al-Harthy to the Advisory Board of ASTI. He is ASTI's first International Board member.









**Association of Science, Technology & Innovation (ASTI) (PPM-012-10-25102012)**

No 16A, Jalan 21/12, Sea Park, 46300 Petaling Jaya, Selangor Darul Ehsan.

**Email :**

asti2510@gmail.com

**Tel/Fax :**

603 - 7877 8571

603 - 7865 5557

(9am - 5pm)

**[www.asti.org.my](http://www.asti.org.my)**