



*Creative & Critical  
Thinking Camp*

**2015**  
Report



## **Creative and Critical Thinking Camp 2015 Report**

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**Special Thanks to**

All Volunteers &  
Organizing Committee



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## Executive Summary

Creative and Critical Thinking Camp (CCT Camp) is a platform for students to develop their higher order thinking skills. It is where students are being given the opportunity to develop their capabilities in creative and critical thinking as well as to generate and evaluate knowledge, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems. Creative and critical thinking are essential for students to think broadly and deeply using skills, behaviours and dispositions at school and in their lives beyond school. The awareness in imparting knowledge and the expansion of thinking skills are acknowledged today as among the primary purposes of the education system. The explicit teaching and implanting of creative and critical thinking throughout the learning areas encourage students to engage in higher order thinking. Students are able to select from a range of thinking strategies and employ them selectively and spontaneously in a range of learning contexts. This is done using logic and imagination, and by reflecting on how they best tackle issues, tasks and challenges.

CCT is an activity-focused programme. Activities that foster creative and critical thinking should be challenging and engaging, and contain approaches that are within the ability of the learners, but also challenge them to think logically, be open-minded, seek alternatives, tolerate ambiguity, explore possibilities, be innovative, taking risks and use their imagination. Therefore our camp is a venue for students to explore these learning methods and outcomes.

The main aim of CCT Camp is to help empower the young to think in both creative and critical manners. Therefore we have our research and development team to create the entire concept and module of the camp. The CCT Working Group was formed to organize the camp in various regions.

This year our team successfully helped organize CCT-ILHAM camp in three zones namely northern, central and southern. They were attended by 803 students, ranging between 13 and 18 years old, from all over Malaysia. All participants were very excited and passionate to attend the camp.

The success of the camp is attributed to our committed instructors, staff and volunteers who have given us their valuable time to conduct this camp. We would like to take this opportunity to thank MCEF for organizing the ILHAM camp which enabled us to conduct the CCT-ILHAM camp.

Thank you.

“Curiosity about life in all of its aspects, I think, is still the secret of great creative people” – Leo Burnett

**Maj Dr. Vikneswaran Munikanan**



# Introduction 1.0

The aspiration of parents for a child is to become good in his or her endeavour. This is only possible when the child is equipped with creative & critical thinking capacity. But young people within the education system today have become spectators rather than participants in their individual 'learning journey'. This may be done by overwhelming them with the subject's "facts and figures" which they memorize for tests and exams and soon forget afterwards. The future generations need to be empowered to think for themselves to solve problems 'on-the-go'. Thus, any subject, within the sciences or the arts, if 'delivered' properly, is able to create this ultimate goal.

This year, a team of motivated experts who have extensive experience in the field of Science, Technology and Innovation as well as Youth Engagement and Empowerment organized CCT camp successfully. This camp empowered the concepts of thinking creatively and critically, of using logical & empirical reasoning to solve problems, of using competitive & collaborative methods to produce an outcome when making choices in many aspects of the participants' lives. The methods were conveyed to them via indoor and outdoor lessons and fun activities in a "camp" environment.



We hope by inculcating and introducing the concept of thinking creatively and critically they may be able to make best choices in their lives. Both methods of logic and empirical reasoning were introduced with simple lectures and fun activities. Besides that, competitive and collaborative methods of producing an outcome were explored by the participants through the guidance of camp trainers.

# Objectives 2.0

- To help empower the youth to think in a creative and critical manner. It consists of presentations and activities.
- To build effective resources, guides, and know-how in order to make this a recurring camp for young people across the country.
- To use both competitive and collaborative methods to produce positive outcome when making choices and solving problems.
- To help youths realize that learning can be fun by not just memorizing facts, but also by understanding and building insight.

## 2.1 Target Group

This year we were able to conduct the camp at 3 different levels: Primary level 2, Secondary School with lower and higher secondary students.

As a start, we held a pre-pilot programme for 36 young students who had just completed their UPSR. We ran the programme at the end of November 2013. It was an all-inclusive 3-day 2-night event. The feedback we received and organizational lessons learnt have helped us prepare for a pilot programme of 3 days and 2 nights held in 2014.





# Mode of Implementation

## 3.0

The Implementation Steps for CCT-2015 are as follows:

- 1) ASTI formed a working group to oversee and be responsible for the delivery of the project. ASTI developed the overall policy of the programme.
- 2) The working group's responsibilities, completed, were:
  - To work together with ASTI to identify funders and partners for the project.
  - To help ASTI R&D Department to develop content and modules for the programme (copyright for the modules shall be owned by ASTI).
  - To identify and organize the training of volunteers and trainers.
  - To identify the venue and organize the logistics for the event.
  - To implement and run the event.
  - To conduct postmortem after the event and identify ways to improve the programme.
  - To dissolve and pass the project back to ASTI.

### **The Content Development Team:**

It is the policy of ASTI that all content development for ASTI's programmes and initiatives to be developed by the ASTI R&D Team. As such, the content and modules for the programme were developed by the ASTI R&D Team. The list of modules developed for CCT is as below:  
(For full details, please refer to Appendix 1)

### **Application Procedure for CCT Camp:-**

To market and inform the public about the CCT, the following steps were taken:

- Flyers were prepared, designed and sent out to many Primary and secondary schools especially SK, Chinese, Tamil and boarding schools. A total of 2200 flyers were sent out.
- Telephone calls were made to selected schools' headmasters and teachers in order to inform them of the project.
- Information was circulated via email and through social Media.
- Application forms were prepared, designed and uploaded to the ASTI website to be downloaded.
- News about CCT was also spread via word of mouth at the Science Fair for Young Children (SFYC) and Young Inventors Challenge (YIC) events.

Once a school or a potential participant showed an interest, the following steps were taken:

- The forms were sent to the Applicants via email and a special team was formed to select the applicants to participate in the camp.
- Selected applicants were sent acceptance letters and informed of the mode of payment.
- Confirmed participants paid fees and signed a waiver form.
- Programme Booklet and various other necessary information were sent to participants.
- Insurances were bought for all participants.
- Participants' arrival and the Camp began.

# Camp Summary

## 4.0

ASTI's CCT camp was scheduled to be held in December 2015 in Hulu Langat. Due to bad weather and flood, the camp was cancelled even though prior arrangements had been made earlier. But that did not deter ASTI from conducting CCT camps. ASTI staff and representatives were trainers at camps organized by Malaysian Community & Education Foundation (MCEF). The camps that ASTI was involved in were called CCT – ILHAM.

The Creative and Critical Thinking Camp (CCT) 2015 - ILHAM was a one-day event which started in the morning and ended in the evening. These camps were held in 3 different zones namely North, Central and South. Students who participated in the CCT 2015 – ILHAM were Form 1, Form 3 and Form 4 students.

Camps for Form 4 students were held in 3 zones, North, Central and South consecutively. The first camp was organized at AIMST University, Kedah on 19 September 2015 with a number of 55 students participating in the camp. Trainers for the camp were Mr. Jaganath, Ms. Chitra & Ms. Archana. On the next day, the camp was conducted at Virgo Batik Resort, Perak on 20 September 2015. Fifty one students participated in the camp and the trainers were Mr. Mohammed Hassan & Ms. Noorul Huda. For the Central Zone, the camp was held at Green View Tarun Enterprise, Negeri Sembilan on the following day, 21 September 2015. Dr. Yunus Yasin, Ms. Vanitha and Ms. Umahsankariah conducted the Central Zone camp and the number of participants was 114 students. The final camp for Form 4 students was convened at Sri Sakthi Ashram, Johor on 22 September 2015. One hundred and six students participated in the camp. Meanwhile the assigned trainers for the camp were Maj. Dr. Vikneswaran, Ms. Vanitha and Ms. Umahsankariah.

Our next CCT-ILHAM camps were for Form 1 students which were all held in November 2015 in 3 zones, North, Central and South. Two camps were organized on the same day on 24 November 2015. One was held at AIMST University, Kedah and the other at Sri Sakthi Ashram, Johor. The CCT camp in Kedah was attended by 57 students, and the trainers were Maj. Dr. Vikneswaran and Ms. Umahsankariah. For the Johor camp, it was convened at Sri Sakthi Ashram, Johor with 76 students participating in the camp. Dr. Yunus Yasin and Ms. Vanitha were the assigned trainers. And the last camp for Form 1 students was conducted on the next day 25 November 2015 by Ms. Noorul Huda, Ms. Vanitha and Ms. Umahsankariah. A total of 67 students attended the camp.

The final camp was for Form 3 students, conducted in December 2015. It started at AIMST University, Kedah with 64 students attending the camp. Ms. Chitra and Ms. Vanitha conducted the camp on 6 December 2015. Two camps were conducted simultaneously on 9 December 2015 at Virgo Batik Resort, Perak and Sri Sakthi Ashram, Johor. Sixty two students attended the training in Perak with Dr. Yunus Yasin & Ms. Vanitha as the trainers. Meanwhile, Mr. Manimaran and Ms. Kalai were the trainers in Johor, and 73 students took part in the camp. Next was at Green View Tarun Enterprise, Negeri Sembilan on 14 December 2015. A total of 133 students participated in the camp while the trainers were Maj. Dr. Vikneswaran & Mr. Jaganath.

# Camp Summary

## 4.0

Below is the agenda for the one day CCT – ILHAM 2015 :

TIME	ITENARY
10.00am - 11.00am	Session 1: Boosting Your 5 Senses / Discover Your Self Time: 30min ( 5min explain, 10 min draw & 15 min share)
11.00am - 12.30pm	Session 2: Tinker
12.30pm - 01.30pm	Lunch
01.30pm - 02.45 pm	Session 3: Relaxation & Concentration Time: 1 hour 15 Minutes
03.30pm - 04.30pm	Session 4: Creative Thinking in Conversation Time: 1 hour
04.30pm - 06.00pm	Session 5: 5 Reasons Why Humans Are Capable of Genius Time: 1 Hour for 5 Activities, Conducted in parrallel as 5 stations were set-up. There were presentations as well.





# Camp Evaluation

## 5.0

A survey was conducted to gather feedback from the participants of the event and sessions. The survey results were then tabulated and all 13 sessions and their activities were assessed by the organizers for their suitability, length and comprehension.

All the participants overwhelmingly agreed that the CCT camp met their expectations and were eager to participate again. They also indicated that they would recommend this camp to their friends and families.

The most popular sessions and activities among the participants were as follows:-



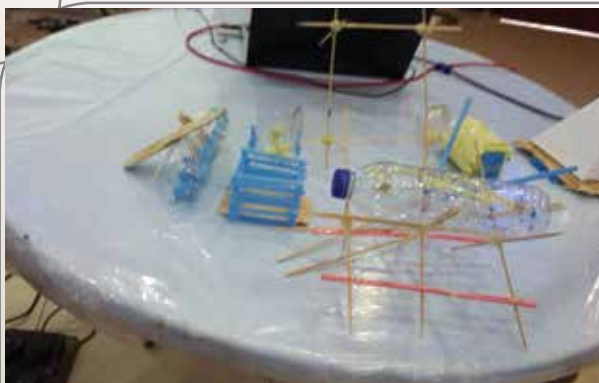
# Public Relations 6.0

Flyers about the CCT camp were distributed to selected schools in Malaysia via email and also posted via hardcopy together with an invitation cover letter. Additionally, the camp was also promoted to the general public via newspaper articles, website and social network Facebook.

A promotion viral video was shared through video sharing websites, social media and email.







# Recommendations for the Future

## 7.0

The following recommendations have been proposed for implementation for the next camp based on the internal post-mortem conducted between the Working Group and ASTI secretariat level.

- An interesting and standardized module with various types of activities
- Participants giving full commitment and actively involved in all the activities
- Invite more working group members for the meeting
- Increase the tools of mass media on publicities and create more awareness on the CCT camp
- Encourage and invite more volunteers to be involved in the camp
- Funding

# CCT Ilham Evaluation

## 8.0

Evaluation was done for Form 1 and Form 3 for CCT Ilham.

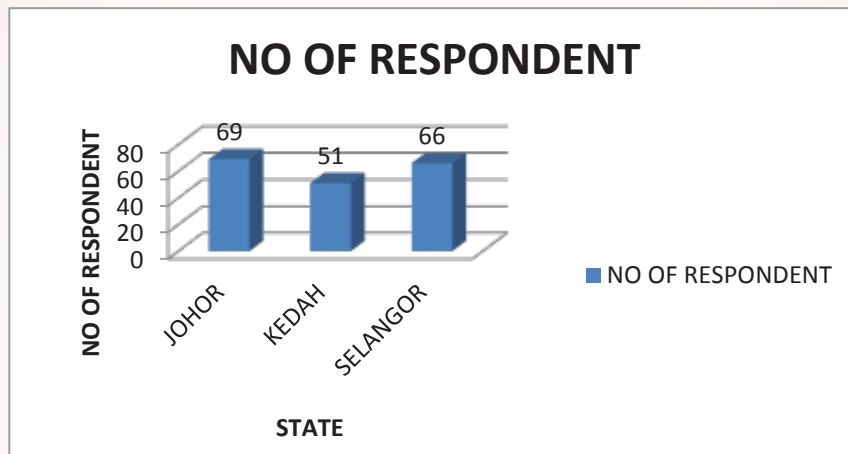


Figure 1 : No. of respondent

Based on Figure 1, a total of 186 Form 1 students responded in the participants' survey during CCT-ILHAM 2015. The highest number of respondents were from Johor with a total of 69 students, while 51 respondents were from Kedah and 66 from Selangor.

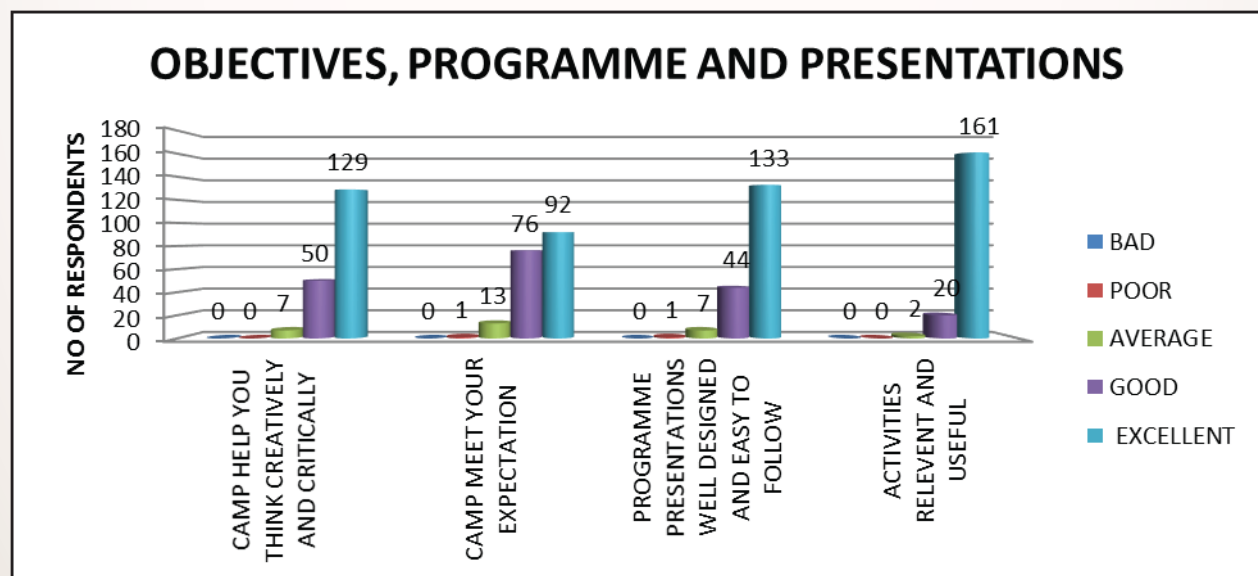


Figure 2 : No. of respondent for objectives, programme and presentations

Figure 2 shows the number of respondents for objectives, programme and presentations. A total of 161 students rated the activities being relevant and useful. A total of 133 students mentioned that the programme and presentations were well-designed and easy to follow. A number of 92 students mentioned that the camp met their expectations. Finally, 129 students mentioned that the camp had helped them think creatively and critically.



# CCT Ilham Evaluation

## 8.0

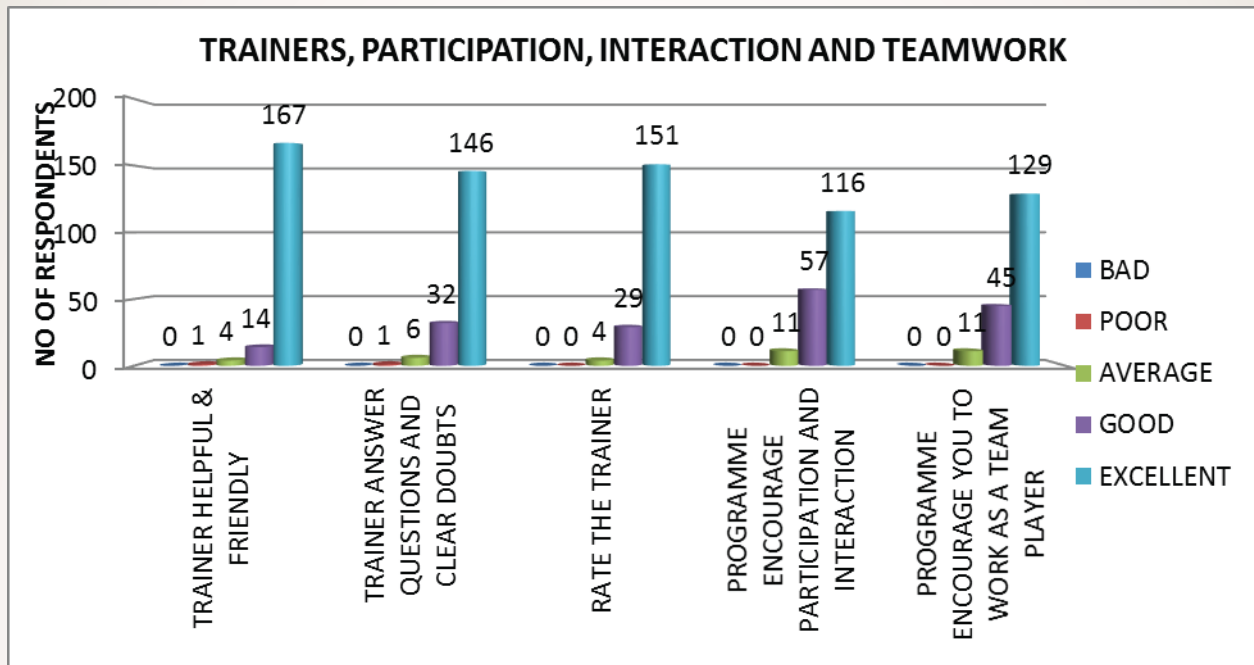


Figure 3 : Survey on the trainers, participation, interaction and teamwork

CCT is an interactive and activity-based programme. Most activities are done in groups and teams. Gamification is also present where participants have to cooperate (within their team members) and compete (with other teams). Our trainers are passionate volunteers who are graduates. Based on Figure 3, a total number of 129 students rated that the programme had encouraged them to work as a team player, while 116 students said that the programme had encouraged their participation and interaction. 167 students rated the trainers as being helpful and friendly. 151 students rated the trainers excellent. A total of 146 students mentioned that the trainers had answered questions and cleared all their doubts.

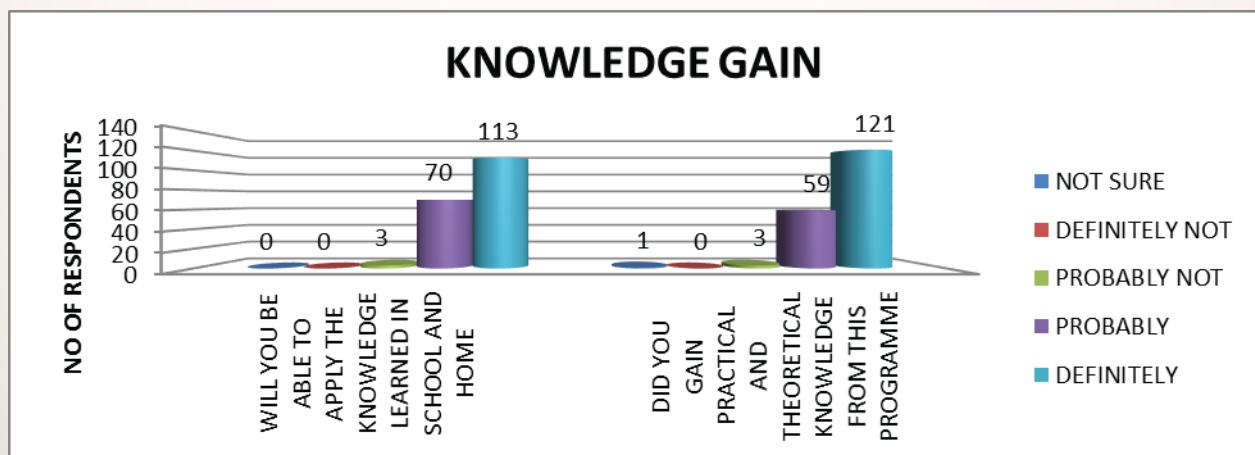


Figure 4 : No. of respondent on knowledge gained

# CCT Ilham Evaluation

## 8.0

One of CCT's main objectives is for the participants to gain practical knowledge and be able to relate it to theoretical knowledge. Based on Figure 4, a total of 121 students mentioned that they had definitely gained practical and theoretical knowledge from the programme. Whereas 113 students mentioned that they would be able to apply the knowledge that they had learned in school and at home. 70 students mentioned that they probably would be able to implement the knowledge that they had learnt. Overall the students were able to gain knowledge from this camp.

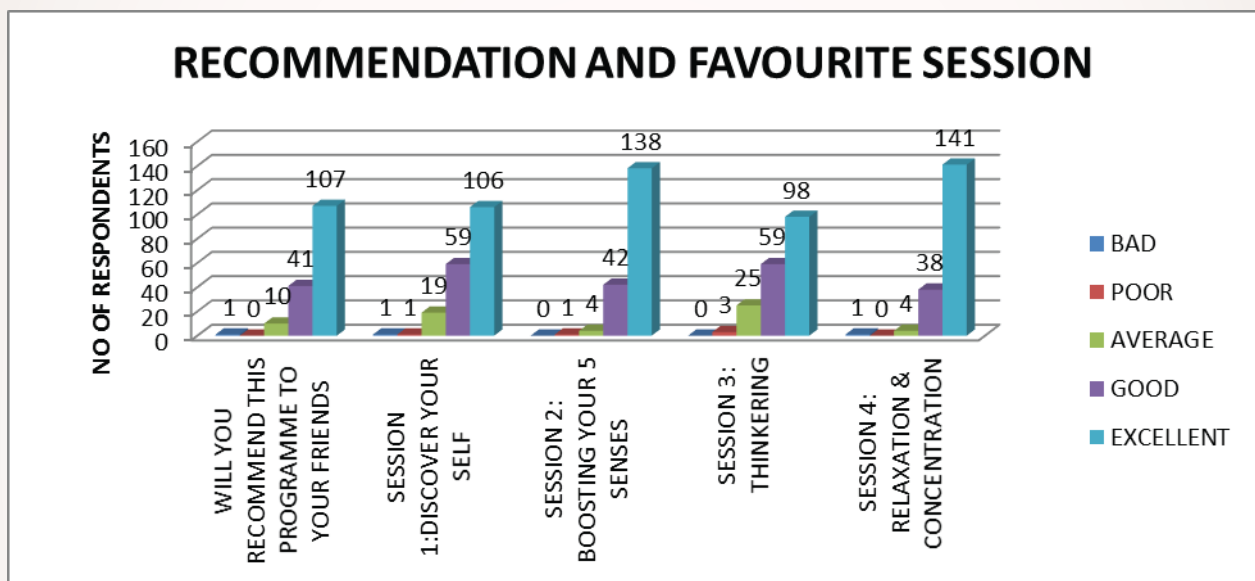


Figure 5 : No. of respondent on recommendation and favourite session

CCT for this workshop consisted of 4 sessions, and each session was followed by a feedback. Based on Figure 5, a total of 141 students rated excellent for Session 4, which was Relaxation and Concentration. For Session 2, Boosting Your 5 Senses, 138 students rated it as excellent. Ninety eight students rated excellent as well for Session 3 (Tinkering). 106 students rated excellent as well for Session 1, which was Discover Yourself. One hundred and seven students mentioned that they would recommend this programme to their friends.



# CCT Ilham Evaluation

## 8.0

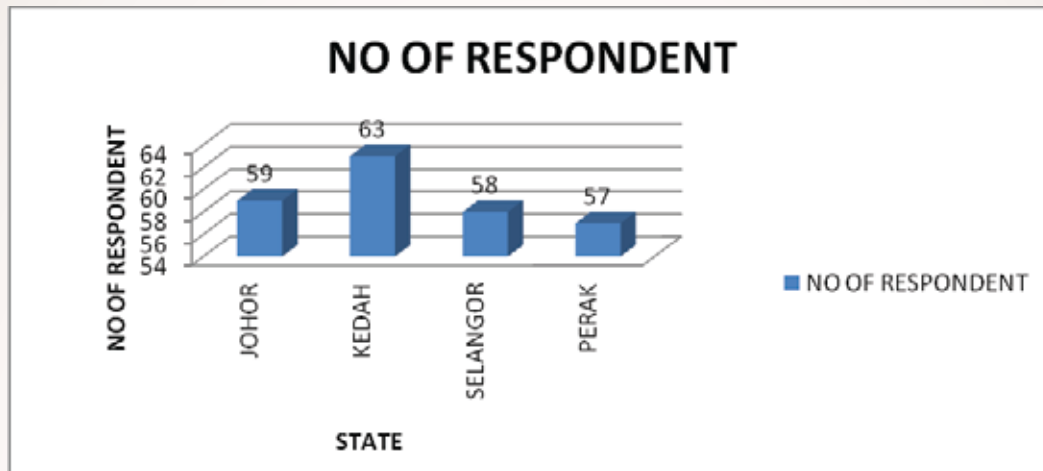


Figure 1: No. of respondent

Based on Figure 1, a total of 237 Form 3 students responded the participants' survey during CCT-ILHAM 2015. The highest number of respondents were from Kedah (63 students), while 59 students were from Johor, 58 students from Selangor and 57 students from Perak.

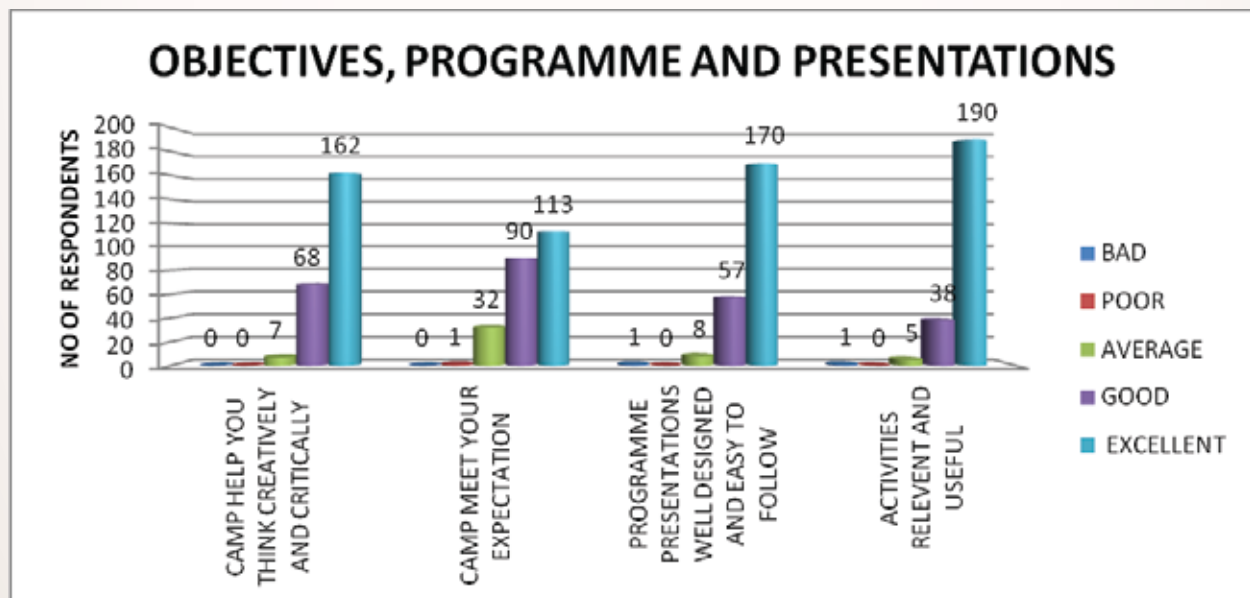


Figure 2: No. of respondent for objectives, programme and presentations

Figure 2 shows the number of respondents for objectives, programme and presentation. A total of 190 students rated the activities being relevant and useful. 170 students mentioned that the programme and presentations had been well-designed and easy to follow. A number of 113 students mentioned that the camp had met their expectations. Finally, 162 students said that the camp had helped them think creatively and critically.

# CCT Ilham Evaluation

## 8.0

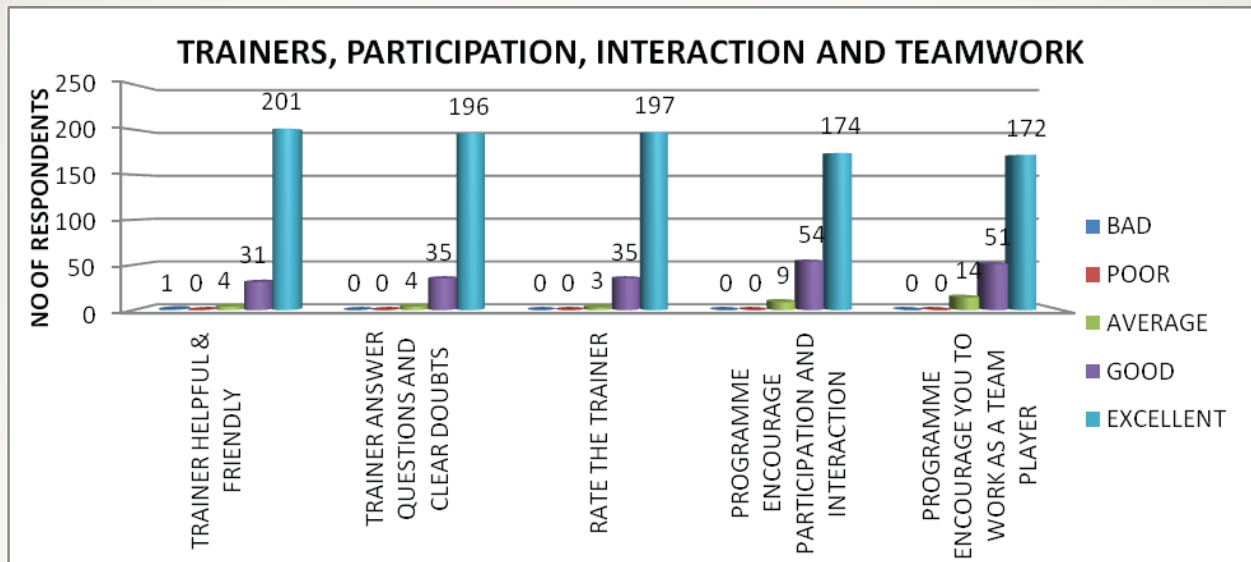


Figure 3 : Survey on the trainers, participation, interaction and teamwork

ASTI believes in a more hands-on approach to learning. CCT is an interactive and activity-based programme. Most activities are done in groups and teams. Gamification is also present where participants have to cooperate (within their team members) and compete (with other teams). Our trainers are passionate volunteers who are graduates. Based on Figure 3, a total number of 172 students rated that the programme had encouraged them to work as a team player. Whereas 174 students rated that the programme had encouraged their participation and interaction. 201 participants rated the trainers as being helpful and friendly. 197 students rated the trainers as excellent. A total of 196 students mentioned that the trainers had been able to answer questions and clear all their doubts.

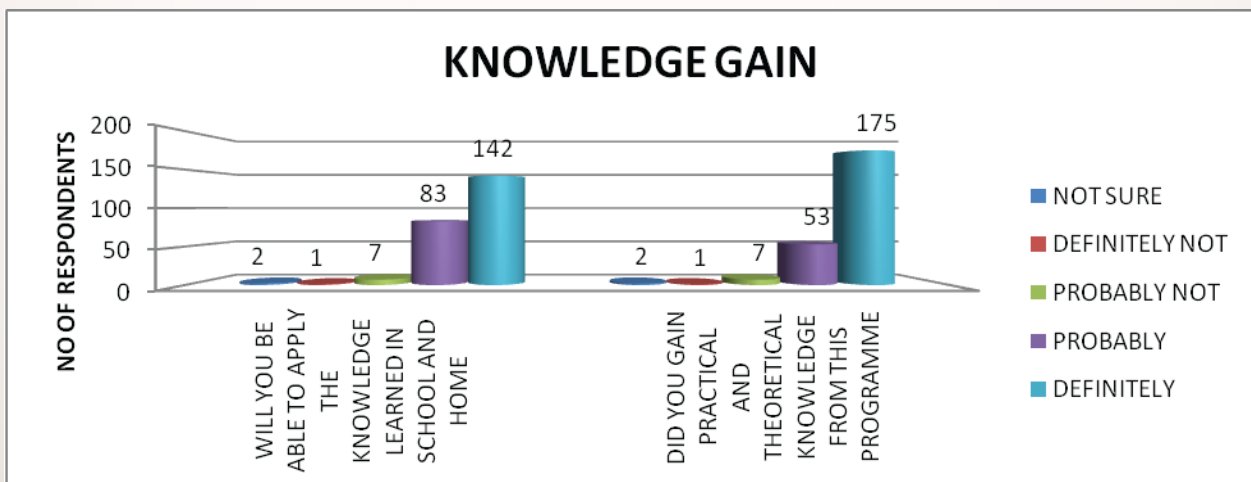


Figure 4 : No. of respondent on knowledge gained

# CCT Ilham Evaluation

## 8.0

CCT contents have been developed with practicality and everyday usage in mind. Based on Figure 4, a total of 175 students mentioned that they had gained practical and theoretical knowledge from the programme. 142 students mentioned that they would be able to apply the knowledge that they had learnt in school and at home. 83 students mentioned that they would probably be able to implement the knowledge that they had learned. Overall the students gained knowledge which they could use from this camp.

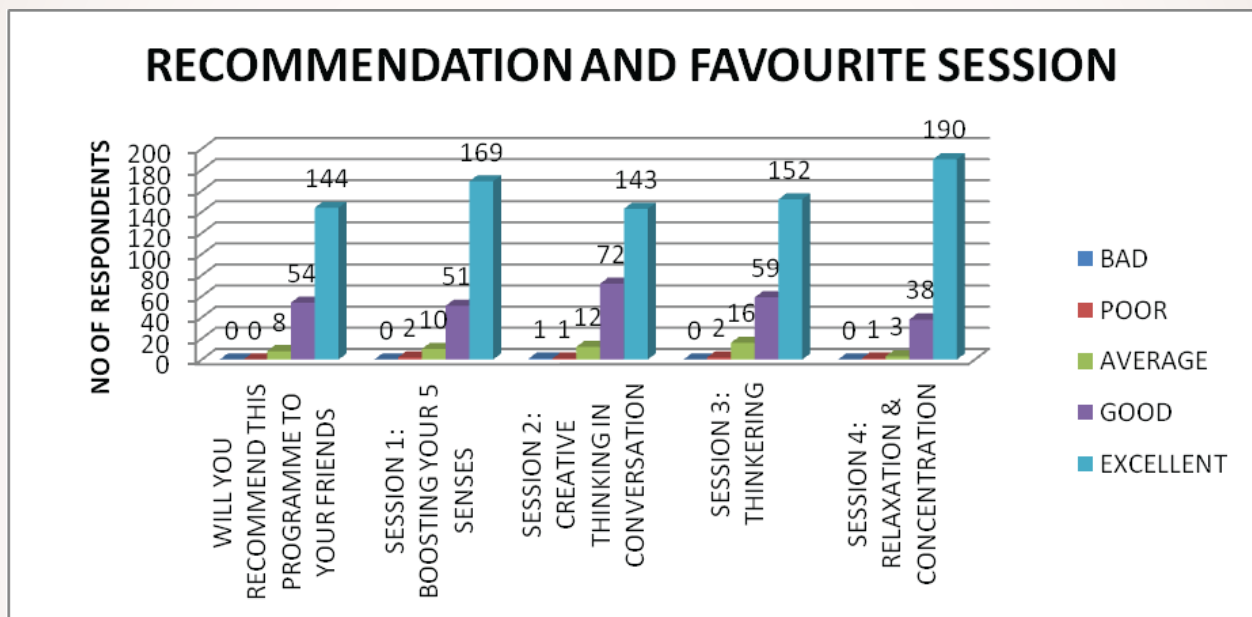


Figure 5 : No. of respondent on recommendation and favourite session

This CCT was made up of 4 sessions or modules. Based on Figure 5, a total of 190 students rated excellent for Session 4, which was Relaxation and Concentration. For Session 1, Boosting Your 5 Senses, a total of 169 students rated it as excellent. One hundred and fifty two students rated excellent for Session 3 (Tinkering). While 143 students rated excellent for Session 2, which was Creative Thinking in Conversation. One hundred and forty four students mentioned that they would recommend this programme to their friends.

# Conclusion- Project Director

## 9.0

The Creative and Critical Thinking Camp has become a benchmark for our students to develop higher order thinking skills. It has become a venue for all students to have an opportunity to enhance their thinking and innovation skills which can transform their life. The camp introduces the concepts of thinking creatively and critically, of using logical & empirical reasoning to solve problems, of using competitive & collaborative methods to produce an outcome when making choices in many aspects of the students' life.

The camp which is conducted by motivated experts from various fields has put in a lot of effort to deliver the best knowledge and skills to the participants. All of them have helped us as volunteers rather than paid staff. Here, we would like to show our sincere gratitude to all volunteers who have contributed their time and knowledge towards the success of this camp. I really hope that the students will be successful in their personal undertakings and will become a valuable asset for this country. We would also like to thank our donors who have contributed funding for the success of the camp.

We hope in years to come we will reach more students and instill the valuable skills and qualities through the Creative and Critical Thinking Camp.

