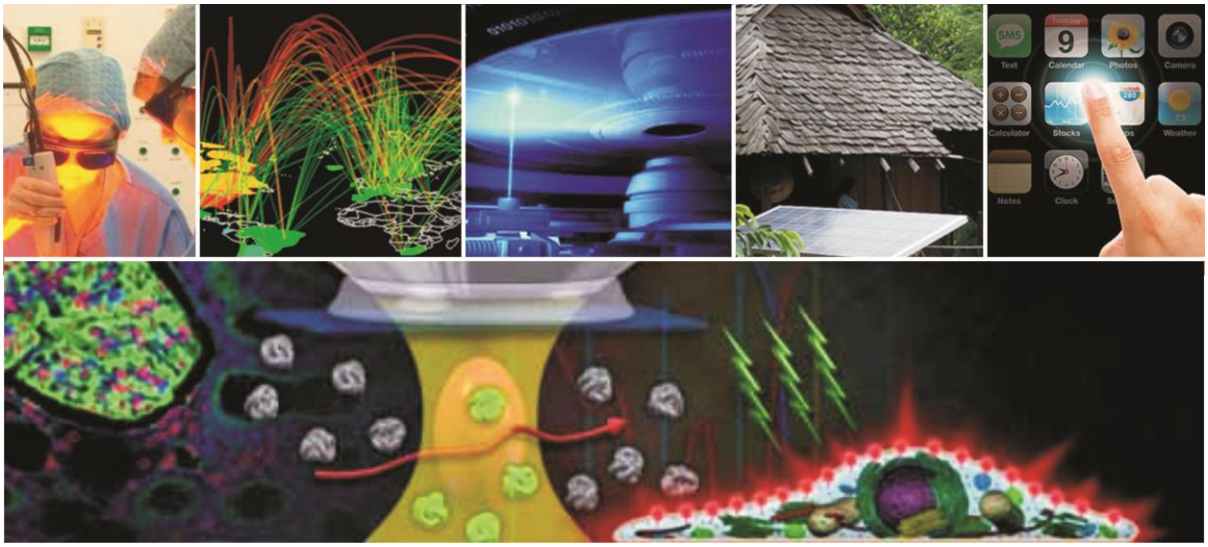


Inspire Internship Programme 2015

Innovation in Science Pursuits for Inspired Research
An initiative of DST, Government of India

INTERNATIONAL YEAR OF LIGHT 2015

13 to 17 July 2015

Organised by

Miranda House, University of Delhi
D S Kothari Centre for Research and Innovation in Science Education

Department of Science and Technology
Ministry of Science and Technology
Government of India

D S Kothari Centre for Research and Innovation in Science Education, Miranda House

Miranda House
University of Delhi

INSPIRE Internship Programme

Organized by
D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

Internship Programme: Monday, 13 July to Friday, 17 July 2015

About the DST INSPIRE Scheme: Innovation in Science Pursuit for Inspired Research (INSPIRE) is an innovative program sponsored and managed by the Department of Science & Technology for attraction of talent to science. The basic objective of INSPIRE is to communicate to the youth of the country the excitements of creative pursuit of science, attract talent to the study of science at an early stage and thus build the required critical human resource pool for strengthening and expanding the Science & Technology system and R&D base. A striking feature of the program is that it does not believe in conducting competitive exams for identification of talent at any level. It believes in and relies on the efficacy of the existing educational structure for identification of talent.

About the INSPIRE Internship Program: One of the component of the Scheme for Early Attraction of Talent for Science (SEATS) is INSPIRE Internship in which annually about 50,000 students of top 1% performers in class X board examinations and pursuing science at plus 2 will be given an exposure with leaders in science in the summer/ winter camps to experience the joy of innovations.

About INSPIRE Award: In order to see and experience the joy of innovation, every year two lakh school children in the age-group of 10 to 15 years i.e., 6^{th} to 10^{th} standards are being identified for the INSPIRE Award. Each INSPIRE Award envisions an investment of Rs. 5,000 per child. The scheme plans to reach at least two students per secondary school during the next five years.

About INSPIRE Eligibility Criteria: Top 1% of students in their X Board Examination and pursuing science in Higher Secondary School Education, i.e. XI and XII standard are eligible to participate in this program. In case the number of students within 1% of respective State Education Board is more than the allocated number for that state, top rankers will be selected for INSPIRE Internship. Accordingly, for the state of Delhi, in the year 2009, the cut-off percentage for Class X Examination was 93% for CBSE and 92% for ICSE. In the year 2010, students with a CGPA of 9.8 and above in their Class X Board Exam 2010 results are eligible. Details about INSPIRE scheme can be found at http://www.inspire-dst.gov.in/ and further, about the INSPIRE Internship at http://www.inspire-dst.gov.in/internship.html.

INSPIRE Internship Camps at Miranda House

Miranda House has been organizing Inspire Internships Camps since 2010. The Mentorship Programme has been specially designed to motivate young students. Each year programme includes motivational overview talks by renowned scientists, demonstration talks by practicing science educators and those engaged in outreach such as the National Science Centre. The exciting hands-on workshops have been specially designed by the D S Kothari Centre for Research and Innovation in Science Education and the faculty at Miranda House.

A brief summary of them is given below:

INSPIRE 2010:

Dates	15 – 20 July 2010
Funding by DST	Rs. 10.4 Lakh
Participant Profile:	
Number of Participating Schools	35
Number of Participating Students	194
Number of Participating Teachers	74

INSPIRE Motivational Talks in 2010: The Programme included motivational overview talks by renowned scientists, among them, Dr. T Ramasami, Secretary, Department of Science and Technology; Dr. Sameer Bhramachari, Director General, CSIR; Dr. N Rathnasree, Director Nehru Planetarium; Dr. Anuj Sinha, Director, Vigyan Parasar; Prof. Narendra Nayak, National President, Federation of Indian Rationalists Association; Prof. S K Tandon and Prof. Dinesh Singh, Delhi University; Dr. Neel Sarovar Bhavesh, ICGEB; Dr. Lakshmikumar, NPL; Dr. Narayan Iyer, Science Society Bangalore; Dr. Lalit Das and Vijayaraghavan Chariar, IIT Delhi; Dr. S V Eswaran, St. Stephens College; Dr. G S Sodhi, Khalsa College; and Mr. Jitin Chawla, Centre for Career Development. Demonstration talks by practicing science educators and those engaged in outreach such as the National Science Centre added to the excitement. A special session was devoted to Creativity and Innovation. The student winner of INTEL's International Science Talent Discovery Fare (STDF), Debarghya Sarkar, was specially invited from Kolkata to share his experiences and details of his prize winning project and journey through innovations.

INSPIRE 2011:

Dates	11-15 July 2011
Funding by DST	Rs. 13.27 Lakh
Participant Profile:	
Number of Participating Schools	29
Number of Participating Students	211
Number of Participating Teachers	18

INSPIRE Motivational Talks in 2011: Based on the success of the earlier programme, several renowned scientists were invited. They are listed below along with the titles of their talks.

Professor Dinesh Singh, Vice Chancellor, University of Delhi; *Learning to be a Scientist – Some Role Model*

Dr. Bhavik Bakshi, Vice Chancellor, TERI University, *Opportunities for Innovation in Sustainability*

Dr. Rajesh Gokhale, Director, Institute of Genomics and Integrative Biology; Decoding *Biological Systems Diversity and Metablic Networks*

Dr. M. A. Khalid, Field Director, Earth Watch India, India Regional Climate Centre; *Climate Change: Issues, Science and Solutions*

Dr. Sujata Mohanty, Director, Stem Cell Facility, AIIMS; Promise of Stem Cells;

Mr. Prasanto K Roy, President and Chief Editor, ICT Publishing Group, Cyber Media; *Technology for the Future*

Dr. Sangeeta Malhotra and Dr. James Rhoads, School of Earth & Space Exploration, Arizona State University; *Cosmology: Dark Energy, Dark Matter*;

Dr. Aditya Mittal, IIT Delhi; *Dynamics and Self-assembly in Biological Systems*

Dr. Rintu Nath, Vigyan Prasar, *Innovative Experiments in Science*;

Dr. Vijayaraghavan Chariar, IIT Delhi; *Indian Knowledge Traditions - Classical and Folk*

Ms. Malathi Lakshmikumaran, Lakshmikumaran & Sridharan (Legal Firm); *The Power of Intellectual Property*

Dr. S. V. Eswaran, St. Stephens College; *Beyond the Classroom*;

Dr. G. S. Sodhi, S. G. T. B. Khalsa College; *Chemical Detection of Latent Fingerprints*;

Demonstration talks by practicing science educators and those engaged in outreach such as the National Science Centre.added to the excitement. The latter presented the intriguing experiments from the *World at Low Temperatures*.

In 2011, the most scintillating part of the Inspire Camp was the visit of Dr. John P. Holdren, Director of the White House Office of Science and Technology Policy, and Co-Chair of the President Obama's Council of Advisors on Science and Technology (PCAST). He was specially invited to the college – at the initiative of the US Embassy, the Indo-US Forum on Science and Technology and the Department of Science and Technology, Govt. of India– to give him a flavor of the Inspire scheme and the expectations of the young science students and also, a first-hand experience of the environment in a premiere science college. After an inspirational Plenary address on science in the US, he interacted over an hour with young students, answering their queries. On this occasion, Dr. T Ramasami, Secretary, Department of Science and Technology delivered a talk titled *Promoting Science Education and Research* while Professor Dinesh Singh, Vice Chancellor, University of Delhi, presided.

INSPIRE 2012:

Dates	16-20 July 2012
Funding by DST	Rs. 11.74 Lakh
Participant Profile:	
Number of Participating Schools	25
Number of Participating Students	197
Number of Participating Teachers	18

INSPIRE Motivational Talks 2012

Dr. T. S. Ramasami, Secretary, Department of Science and Technology, Government of India.

Professor Shubha Tole, Tata Institute of Fundamental Research, Mumbai; *We All Began from an Egg…Ande ka Funda*

Professor Paramjit Khurana, Department of Plant Molecular Biology, South Campus, University of Delhi; *The World of Biotechnology*

Dr. Achana Sharma, Senior Scientist, CERN, Geneva, Switzerland (via video conference) and Dr. Kirti Ranjan, Department of Physics and Astrophysics, University of Delhi; *Understanding the Universe: Search for the God Particle*

Professor S K Tandon, Former Pro Vice Chancellor and Professor Emeritus, Department of Geology, University of Delhi; *Human Transformation of Earth*

Professor K Kannan, University School of Biotechnology, GGS Indraprastha University, Delhi; *Fixed Mindset and Evolving Ideas*

Mr. Dinesh Malik, Education Officer, National Science Centre, Pragati Maidan, New Delhi; *Fascinating Physics: Stage Science Show*

INSPIRE in 2013:

Dates	15-20 December 2013
Funding by DST	Rs. 13 Lakh
Participant Profile:	
Number of Participating Schools	33
Number of Participating Students	222
Number of Participating Teachers	67

The highlight in the year 2013 was the visit by two Nobel Laureates: Dr. Venki Ramakrishnan, 2009 Nobel Laureate for Chemistry and Sir Paul Maxime Nurse, 2001 Nobel Laureate for Physiology or Medicine. Both spent several hours interacting with the participating students, undergraduate students and faculty.

INSPIRE Motivational Talks 2013

Professor Sir Paul Maxime Nurse Nobel Laureate 2001, Physiology or Medicine; *Controlling the Cell Cycle*

Dr. Venki Ramakrishnan Nobel Laureate 2009, Chemistry; *From a Childhood in India to Seeing the Structure of the Machine that Reads our Genes*

Dr. Sudeshna Mazumdar Leighton, Department of Botany, University of Delhi *Multiple Dimensions of the Biotic Environment of Plants*

Professor Dipankar Bhattacharya Inter-University Consortium for Astrophysics and Astronomy (IUCAA), Pune; *The Big Data in Astronomy: the Citizen Science Initiative*

Dr. Satyajit Rath National Institute of Immunology, New Delhi; *Immune to change: How the past meets the future in our microbial defences*

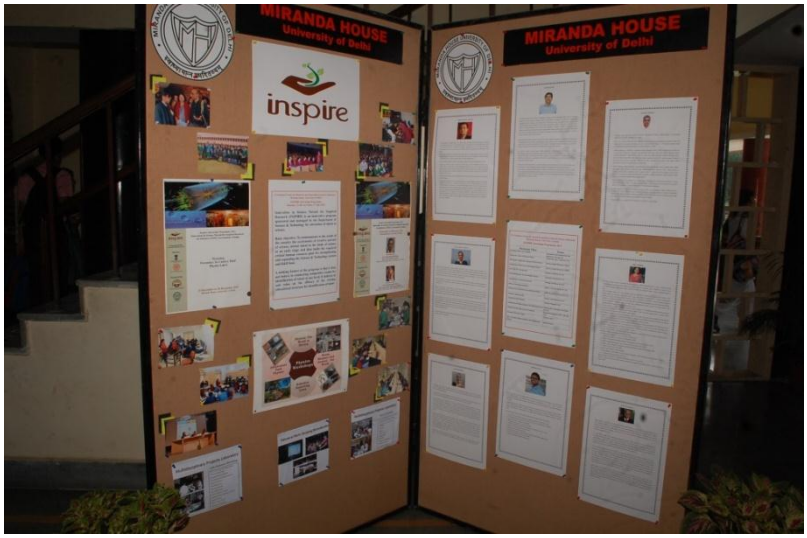
Professor Sriram Ramaswamy Director, TIFR Centre for Interdisciplinary Sciences, Hyderabad; *Active Matter: Flocks and Swarms from Micrometers to Kilometers*

Mr. Dinesh Malik, Education Officer, National Science Centre, Pragati Maidan, New Delhi; *Fascinating Physics: Stage Science Show*

INSPIRE in 2015:

Dates	13-17 July 2015
Funding by DST	Rs. 13 Lakh
Participant Profile:	
Number of Participating Schools	35
Number of Participating Students	278
Number of Participating Teachers	70

The highlight this year was the visit and interactive session with Dr. Tessy Thomas. She spoke about her experiences as '*Agniputri*' (daughter of fire, as she had been christened by Dr. APJ Abdul Kalam), the scientist who was at the forefront of the development work for the Agni missiles. Her presence was especially inspiring for the girl students since she told them that technology was gender-neutral and if their work was good, they would not face any discrimination at the workplace. Abhishek Raju's presentation as one of the pioneers of the private space enterprise in India was also well received by the students, particularly because he was so young and also came from a non-science background. The school and college students present were inspired to know that if one makes up one's mind, anything is possible. Mr. H.M. Chitale, the CEO of Philips Lighting Solutions, inspired everyone in the audience to be good citizens by investing in LED lighting which cuts down electricity bills in the long run and saves on power for the householder as well as the country.



D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015

DAY 1	**Monday, 13 July 2015**
08.30 am to 09.30 am	**Registration** Venue: Miranda Arcade and Miranda Foyer
09.30 am to 09.45 am	*Welcome Address: Introduction to INSPIRE Internship Program* Dr. Pratibha Jolly, Principal Miranda House and PI DSKC
09.45 am to 11.15 am	**Motivational Talk** Mr. Harshavardhan Chitale CEO, Philips Lighting Solutions South Asia
11.15 am to 11.30 am	Mid Day Snack
11.30 am to 01.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.00 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
DAY 2	**Tuesday, 14 July 2015**
09.30 am to 11.00 am	**Motivational Talk** *Medical Imaging : Applications to Neuroscience* Dr Subash Khushu NMR Research Centre, Institute of Nuclear Medicine & Allied Sciences
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
DAY 3	**Wednesday, 15 July 2015**
09.30 am to 11.00 am	**Motivational Talk** *Revolutions in Optics* Professor Anurag Sharma Indian Institute of Technology, Delhi
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Stage Science Show** *Fascinating Physics* Education Outreach Team, National Science Centre, Delhi
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*

DAY 4	**Thursday, 16 July 2015**
09.30 am to 11.00 am	**Motivational Talk** *Excitement in Laser Spectroscopy* Professor Kankan Bhattacharyya Indian Association for Cultivation of Science, Kolkata
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
DAY 5	**Friday, 17 July 2015**
09.30 am to 11.00 am	**Motivational Talk** Mr. Abhishek Raju Dhruva Space, India
11.00 am to 11.30 am	Mid Day Snack
11.30 am to 01.00 pm	**Motivational Talk** Dr. Tessy Thomas Project Director, Agni IV and Agni V Missile Defence Research and Development Organization (DRDO)
01.00 pm to 02.00 pm	Lunch
02.00 pm to 03.30 pm	**Motivational Talk** Dr. Subhadra Menon and Mr. Pallava Bagla Award Winning Science Writers and Communicators Authors of Reaching for the Stars: India's Journey to MARS and Beyond
03.30 pm to 04.00 pm	**Valedictory Session** *Feedback* *Distribution of Certificates*

Workshop Titles

1. Chemistry: The Green Pathway
2. Chemistry: Colors of Gold and Silver
3. DNA and Enzymes: Tiny but Mighty Players
4. The Cell: Life's Playground
5. Designing Life: Small Experiments
6. The World of Molecules: Playing with Structures
7. Physics: The World in Motion
8. Physics: Sense, Measure and Control the World
9. Robotics: Impacting Life
10. Going Green: Science for a Sustainable Future
11. Science on the Move: Amusement Park Physics
12. Simulations and Video Analysis: The Modelling Game
13. Remote Sensing: Map Your Environment
14. Forensics: To Catch a Thief
15. Kites in Capital: Urban Ecology of the Commonest Raptor

NOTE:

- Each day will bring a surprise gift.
- Exciting prizes can be won for vibrant interaction, best interjection and participation in quizzes.
- Students are encouraged to showcase a project or piece of scientific work.

List of Experts/ Mentors outside Miranda House

1. Mr. Harshvardhan Chitale, CEO, Philips Lighting Solutions South Asia
2. Dr. Subhash Khushu , Scientist-'G' & Addl. Director, Head, Division of Radiological Imaging & Biomedical Engg., NMR Research Centre, Institute of Nuclear Medicine & Allied Sciences(INMAS), Delhi
3. Professor Anurag Sharma, Department of Physics, Indian Institute of Technology, Delhi
4. Professor Kankan Bhattacharyya, Department of Physical Chemistry, Indian Association for Cultivation of Science, Kolkata
5. Mr. Abhishekh Raju, Chief Strategy Officer, Dhruva Space, India
6. Dr. Tessy Thomas, Project Director, Agni IV and Agni V Missile, Defence of Research and Development Organization (DRDO)
7. Dr. Subhadra Menon and Mr. Pallava Bagla, Award Winning Science Writers and Communicators, Authors of Reaching for the Stars: India's Journey to MARS and Beyond
8. Mr. Dinesh Malik, Education Officer, National Science Centre, Pragati Maidan, New Delhi
9. Dr. Kanudeep Kaur, Depatment of Forensic Science, SGTB Khalsa College, University of Delhi, Delhi

List of Experts/ Mentors from Miranda House

Department of Physics

1. Dr. Pratibha Jolly
2. Dr. Mallika Verma
3. Dr. Monika Tomar
4. Dr. Anjali Sharma
5. Dr. Geeta Ray
6. Dr. Preeti Kumari

Department of Chemistry

7. Dr. Bani Roy
8. Dr Amrita T. Sheikh
9. Dr. Mallika Pathak
10. Dr. Sharda M. Sonkar
11. Dr. Smriti Sharma Bhatia
12. Dr. Kalawati Saini
13. Ms. Nutan Rani
14. Dr. Malti Sharma
15. Dr. Anita Kumari

Department of Botany

16. Dr. Janaki Subramanian
17. Dr. Saloni Bahri
18. Dr. Somdatta Sinha Roy

Department of Zoology

19. Dr. Rekha Kumari
20. Dr. Sadhna Sharma
21. Dr. Anjana Singha Naorem
22. Dr. Jyoti Arora
23. Dr. Monika Sharma
24. Dr. Simran Jit
25. Dr. Bijaya
26. Dr. Richa

Department of Geography

27. Ms. Punam Behari
28. Dr. Rakhi Parijat
29. Ms. Anuradha Shankar

Department of Mathematics

30. Dr. K. V. Shantha
31. Dr. Ritu Gupta
32. Mr. Jatin Anand
33. Ms. Shweta Gandhi

PARTICIPATING SCHOOLS

S.No	School Name	No. of Students
1	Apeejay School Pitampura	6
2	Bal Bharti School Dwarka	6
3	Bal Bharti Public School, Pitampura	6
4	Bal Bharti Public School, Rohini	10
5.	DL DAV Model School	16
6	DPS Dwarka	1
7	DPS (Mathura Road)	19
8	KRM Vikaspuri	2
9	KV No.2 AFS Hindan	10
10	KV Andrews Ganj	
	Morning Shift	10
	Evening Shift	10
11	KV NO. 1 Delhi Cantt. Morning Shift	10
	Evening Shift	7
12	KV No. 3 Delhi Cantt. Morning Shift	5
	Evening Shift	2
13	KV DL Meerut	8
14	KV Kamla Nehru Nagar Morning Shift	2
15	KV Keshavpuram	9
16	KV Muradnagar	8
17	KV NFC Vigyan Vihar	5
18	KV NTPC Dadri	1
19	KV Pashim Vihar	6
20	KV Pushp Vihar Morning Shift	13
	Evening Shift	3
21	KV Shalimar Bagh	7
22	KV Tagore Garden	13
23	KV Tuglagabad Morning Shift	9
	Evening Shift	2
24	KV Vikaspuri	8
25	Laxman Public School	5
26	Manav Sthali School	9
27	Modern School (Barakhamba)	7
28	Mother's International School	7
29	Sri Venkateshwar International School	7
30	St Mary's School	2
31	Tagore International School	4
32	Vasant Valley	3
33	Ramjas Dayboarding	1
34	Cambridge School	6
35	KV Sainik Vihar	9
TOTAL		**278**

LIST OF PARTICIPATING STUDENTS

S.No.	School	Name of student
1	Apeejay School Pitampura	Kunal Gupta
		Ishita Amar
		Shristi Gupta
		Japtegh Singh
		Navreet Kaur
2	Bal Bharti School Dwarka	Piyush Khanna
		Aditiya Saxena
		Ayush Agarwal
		Syed Md. Raza
		Akash Yadav
		Raunaq Singh Balyan
3	Bal Bharti Public School, Pitampura	Pranav gupta
		Radhita Gupta
		Aditya sanghi
		Rachit Jain
		Abhinav Singhal
		Aditi Aggarwal
		Vaibhav Thakker
		Sejal
		Shikhar
		Bhumika Singhal
4	Bal Bharti Public School, Rohini	Kamakshi bansal
		Kuja
		Ruchika
		Vani Bansal
		Rishabh gupta
		Akshat Aggarwal
		Dhruv Singhal
		Anurag Gupta
		Rohish Pratap Singh
		Rohan Gupta
5	DL DAV Model School	Sahil Gandhi
		Saksham Garg
		Riddhi Sharma
		R. Yamini
		Aditi Gupta
		Nikhil Bambal
		Anahita Singla
		Anisha Gupta
		Siddhant Nagpal
		Mohit Yadav
		Rahul Madan
		Megh Nadar

		Chinmay Singh
		Ashutosh Sharma
		Yuvraj Sareen
6	DPS Dwarka	Devang Sehgal
7	DPS ,Mathura Road	Apoorva Saxena
		sameer Arora
		Abhinav Pathak
		Aditi Chawla
		Ujjwal Jain
		Shreya Gupta
		Yashodhara T
		Aashay Jain
		akshat Gupta
		Ronit Gupta
		karan Kumar
		Saumyaa Mehra
		Anu Singh
		Radhika maheshwari
		Minesh Agrawal
		Mukul Ranjal
		Manao Mairangthem
		Naurem Arbin Singh
		Harshvardhan Walia
8	KRM Vikaspuri	Aanchal Singla
		Devansh Popli
9	KV No.2 AFS Hindan	Ashish Gaurav
		Divyansh Kaushik
		rahul Rana
		Rahul Singh
		Astha Kukreti
		Manisha Kumari Kar
		Mansi Sharma
		Deepanwita Das
		Sakshi singh
		Swati pandey
10	KV Andrews Ganj	Shruti
	SHIFT 1	Muskan Trishal
		Harsh Anand
		Kartikey Singh
		Dinesh Nath
		Aman
		Riyanshu
		Pratyuj Pratap Singh
		Sandipa Rajak
		Ipshita Ghoshal

	SHIFT 2	Rohit Kumar
		Gyatri J
		Vaibhav Kumar Ojha
		Nitish Arya
		Prakhar Raj
		Anjali
		Samiksha Mishra
		Deepak
		Gagan Kumar Tilak
		Bharti
11	KV NO. 1 Delhi Cantt.	Ishav Lohia
	SHIFT 1	Mojit
		Md. Aamir Ahsan
		Somesh ranjan Sahoo
		Prasanna Kumar Swain
		Mohammad Fraz
		Abhishek
		Akansha Rai
		Pooja
		Akanksha Roy
	SHIFT 2	Govind Kumar Jha
		Himanshu Sajwan
		Pooja Singh
		Samir Pattanayak
		Prabhu Dutt
		Manish
		Riya Garain
12	KV No. 3 Delhi cantt.	Amandeep Jakhar
	SHIFT 1	Ahad Ali
		Anand Kumar
		Alakh Niranjan
		Himanshu Shukla
	SHIFT 2	Paras Chaudhary
		Yash Rathore
13	KV DL Meerut	Bhavya Pandey
		Abhay Sharma
		Aman Tariyal
		Ujjawal Srivastava
		Ankit Prakash
		Deepak Pant
		Shubham Vats
		Sonal Sharma
14	KV Kamla Nehru Nagar	Mannu Tyagi
	SHIFT 1	Arkja Bajpai

15	KV keshavpuram	Zaid
		Shilpi
		Mahima
		Nikita
		Ritika
		Mozammil hassan
		sakshi
		Lakshay
		Ayushi Verma
16	KV Muradnagar	Indra kumar
		Jatin Verma
		tanya Tomar
		Kajal Punia
		Aastha Tyagi
		Vandana sagar
		Gaurangi
		Akshita Malik
17	KV NFC Vigyan Vihar	Rohan
		Ekta sharma
		Koushiki chaterjee
		DSV sindhuja
		Prachi kaushik
18	KV Paschim Vihar	Mohit
		Himani
		Purnima Singh
		Ayush Srivastava
		Sanchit Jain
		Parneet kaur
19	KV Pushp Vihar	Shivansh Tripathi
	SHIFT 1	Anshika Baunthiyal
		Ayushi
		Sonam
		Ritika
		Khushboo
		Afzal Ahmad
		Grace Mathew
		Rakhi Vijay Kumbharu
		Manish vermam
	SHIFT 2	Pallavi
		Ankit Srivastava
		Kushal Kumar
20	KV Shalimar Bagh	Pallavi
		Pankaj
		Vikas

		Vaishnavi
		Shivendra Shekhar Arya
		Akash Malik
		Shivam Tyagi
21	KV Tagore Garden	Aashish Upadhay
		Vishal Sharma
		Shubham singh
		Mayur
		Devang Pandey
		Deepika
		Shridhar Rai
		Haritha k. Haridas
		Harleen Kaur
		Saurab Rai
22	KV Tuglagabad SHIFT 1	Astha Sharma
		Saurav Sharma
	SHIFT 2	Praveen Yadav
		Ravi Kumar Jha
23	KV Vikaspuri	Tushar Verma
		Bhumika Gupta
		Nisha Negi
		Abhishek Gautam
		Aleesha Mathew
		Austin Jhony
		Raj Gupta
25	Laxman Public School	Parth Malhotra
		Khwaish Grover
		Yushant Tyagi
		Saiba Dalmia
26	Manav Sthali School	Mansi Kathuria
		Vasu Goel
		Harshit Mahajan
		Poorva jain
		Arshit narang
		Kriti Kapoor
		Simran rajpal
27	Modern School (Barakhamba)	Kritika jain
		Raghav Gupta
		Vidit jain
		saksham Puri
		Vanshika Podar
		yatin Arora
		Amit Kumar

28	Mother's International School	Arpit Behra
		Vidit Agrawal
		Ananya srivastava
		N.R. Anasuya
		Manaswi Sharma
		Kriti sanghi
		Tanvi Suri
29	Sri Venkateshwar International School	Shefaali Deshpandey
		Ritika Kumar
		Vinay Shokeen
		Aditi garg
		Spandan Kaushik
		Sidharth Jain
		Ankit Singh
30	St Mary's School	Anisha Jindal
31	Tagore International School	Shitanshu Raj
	East Of Kailash	Alakananda Chakraborty
		Muskaan Chhabra
		S Ashwin Balaji
32	Vasant Valley	Jahanvi Toshniwal
		Nikita Dhawan
		yash garde
	Late Schools	
1	Cambridge School	Sheena Garg
		Khwaja Wisal Maqsood
		Mohd. Faraz Alam
		Vasu Malhotra
		Sambhav Jain
		Animesh Barua
2	KV Sanik Vihar	Siddharth.S.
		Gaurav Ranjan
		Aditya Vashistha
		Manvi Kakroo
		Ragini
		Aastha Upadhaya
		Mansi Malik
		Nikita Sharma
		Chesta Sharma
3	KV No. 2 Delhi Cantt	Rishu Kumar
	Shift-1	Rohit
		Ritwik Raj Bose
		Sameer
		Akash Kumar Jha
		Charu Lata
		Swati

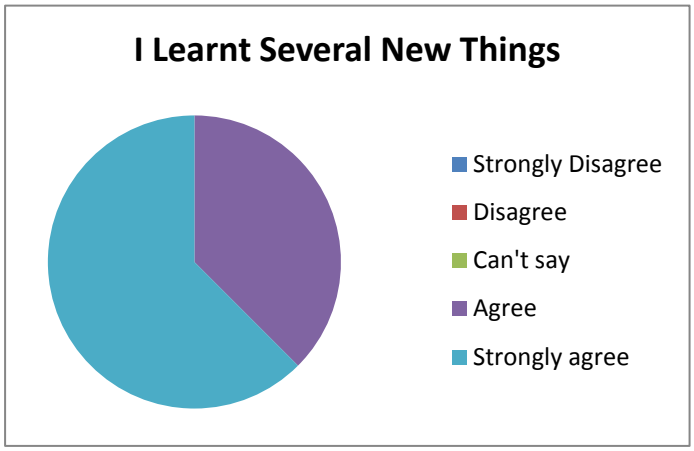
		Priyanshi
		Deepanjli Roy
		Aakriti
	Shift 2	Ashutosh Sahu
		Sashwat Sahoo
		Aniket Kumar
		Mrityunjay Sahoo
		sahara senapati
		Simran
		Shivangi
		Aditi
		Ankita Paul
		Shalini Pal

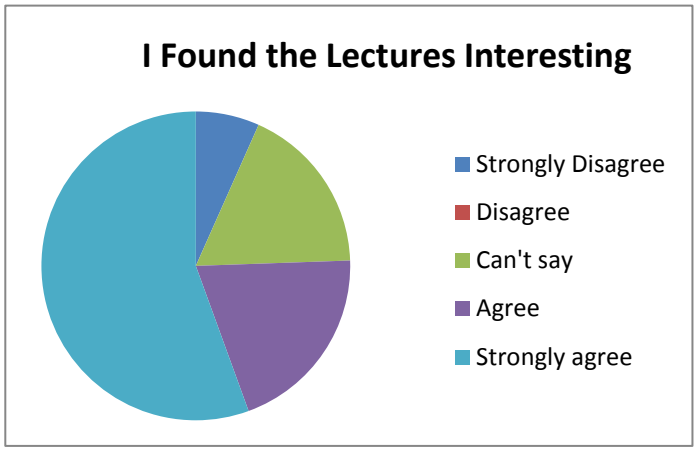
13 – 17 July 2015

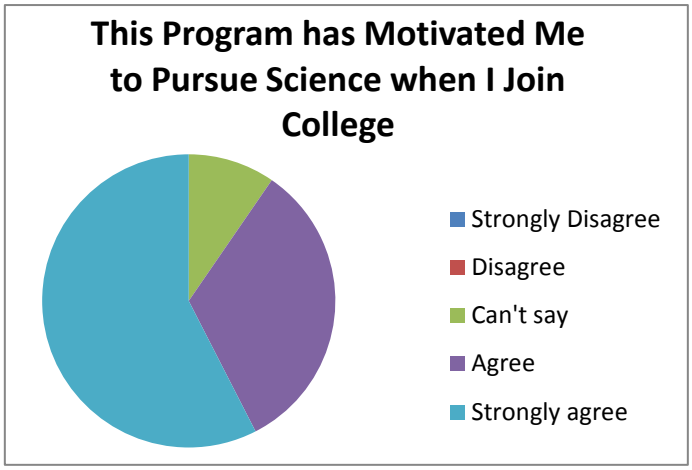
Feedback

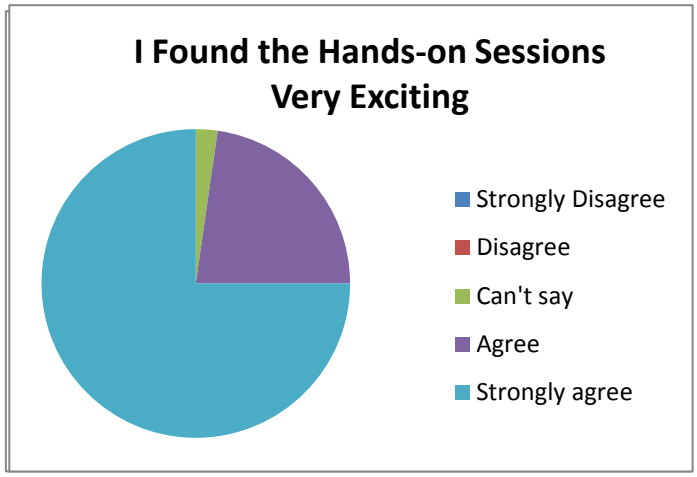
INSPIRE INTERNSHIP PROGRAM 2015

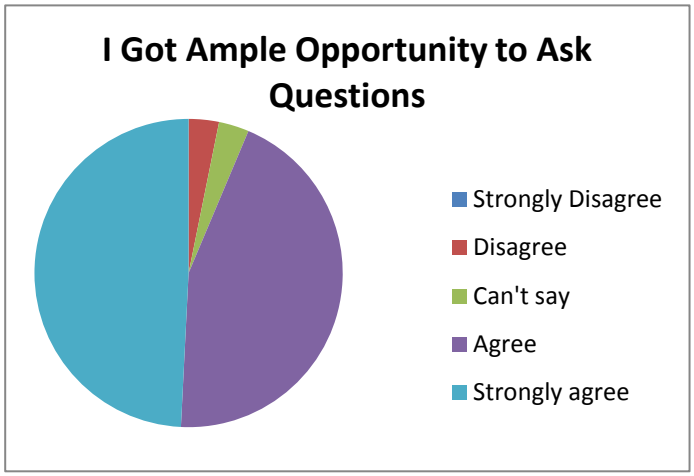
13 – 17 July 2015
INSPIRE Feedback: Response of nearly 250 students

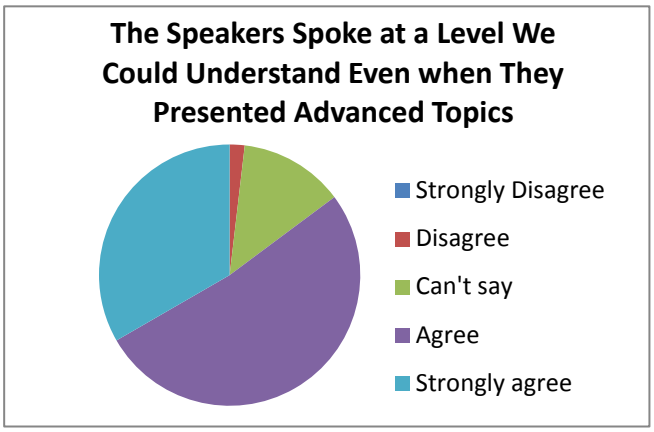


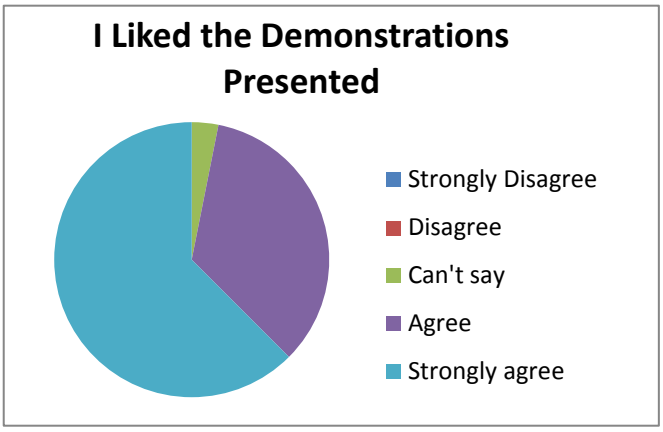




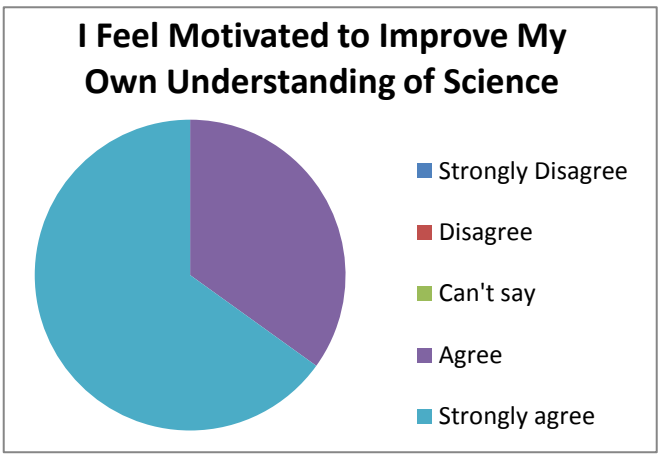


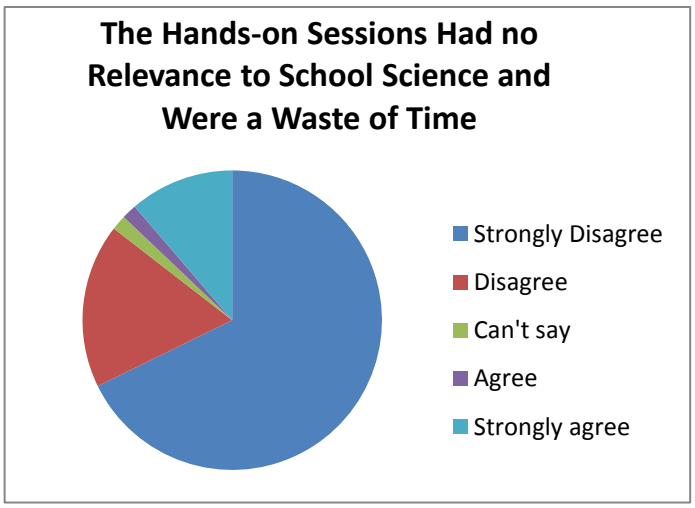


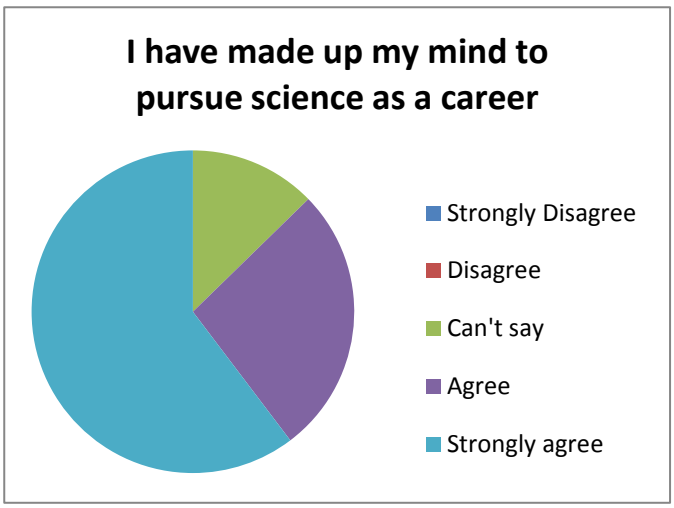

The Speakers Spoke at a Level We Could Understand Even when They Presented Advanced Topics
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree

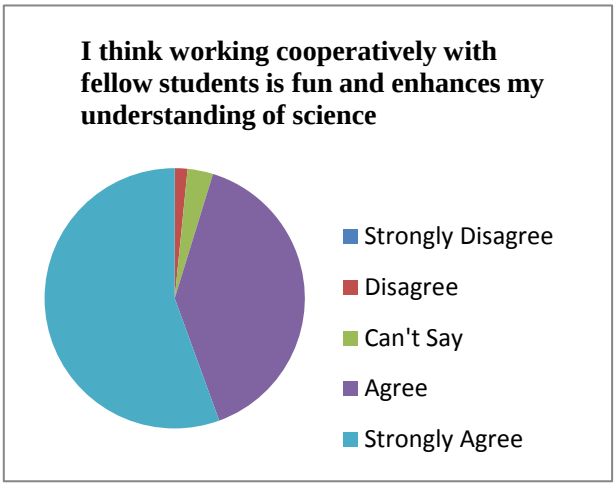

I Liked the Demonstrations Presented
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree

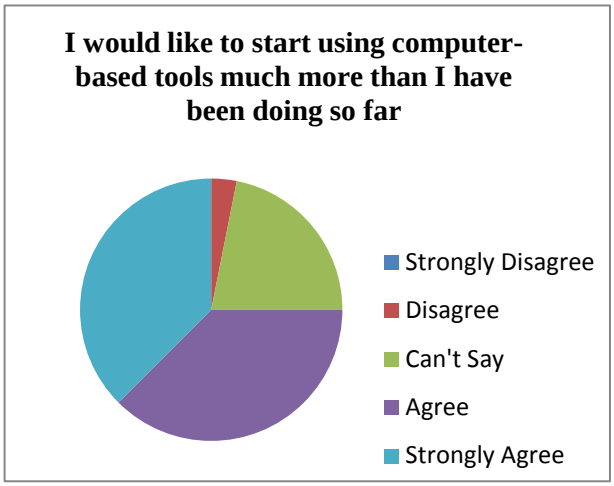
I enjoy working on projects and the programme has given me ideas on what to do
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree


I Feel Motivated to Improve My Own Understanding of Science
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree

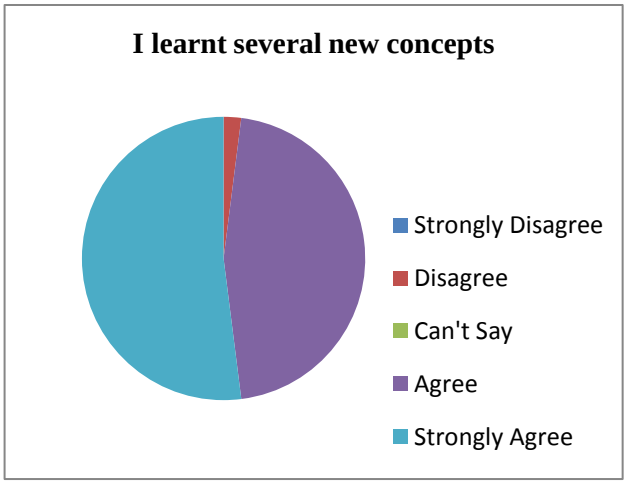

The Hands-on Sessions Had no Relevance to School Science and Were a Waste of Time
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree

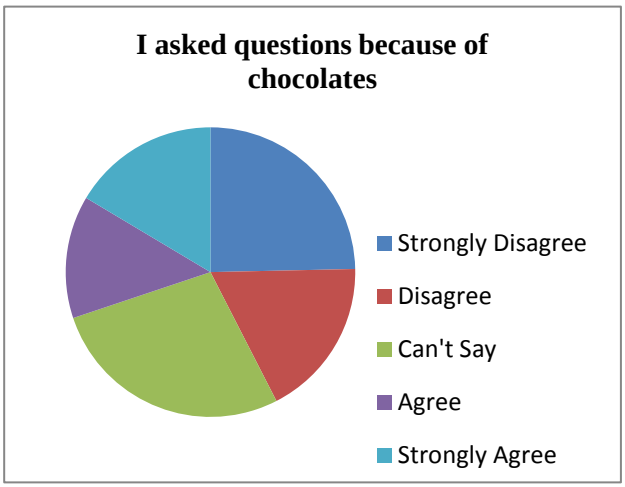

I have made up my mind to pursue science as a career
Strongly Disagree
Disagree
Can't say
Agree
Strongly agree

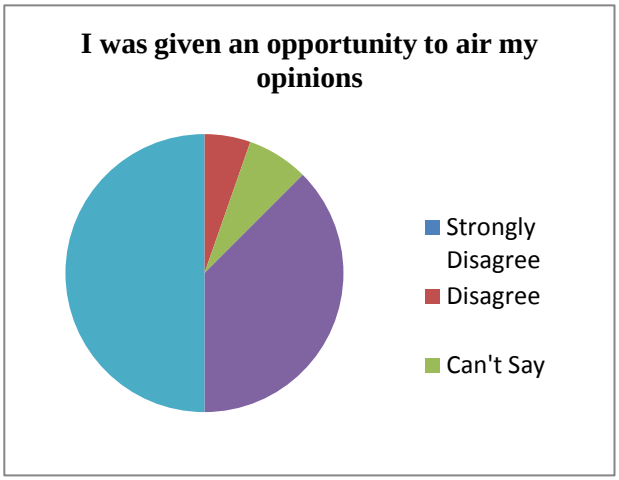

I think working cooperatively with fellow students is fun and enhances my understanding of science
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

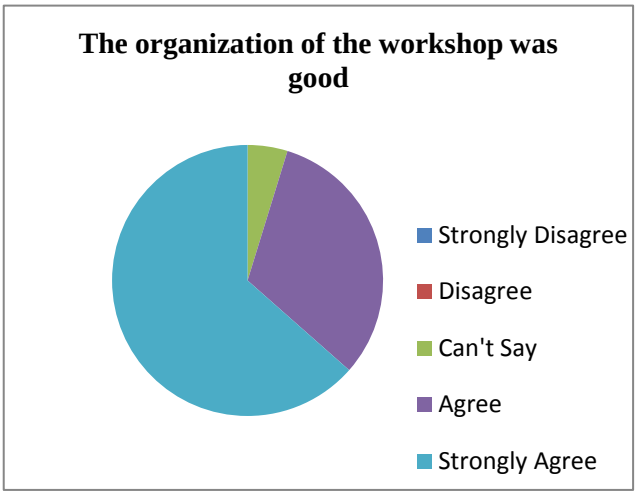

I would like to start using computer-based tools much more than I have been doing so far
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

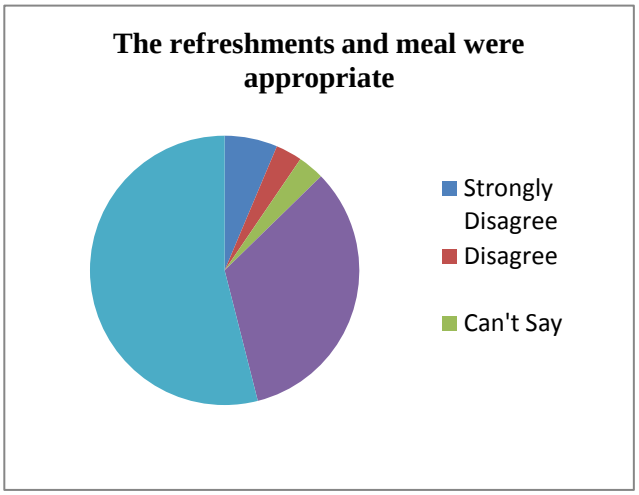
The eventual success of this program will depend on the level of my own motivation
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

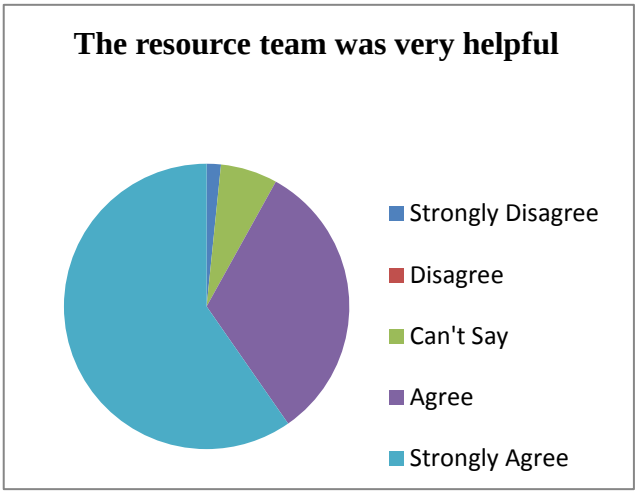

I learnt several new concepts
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

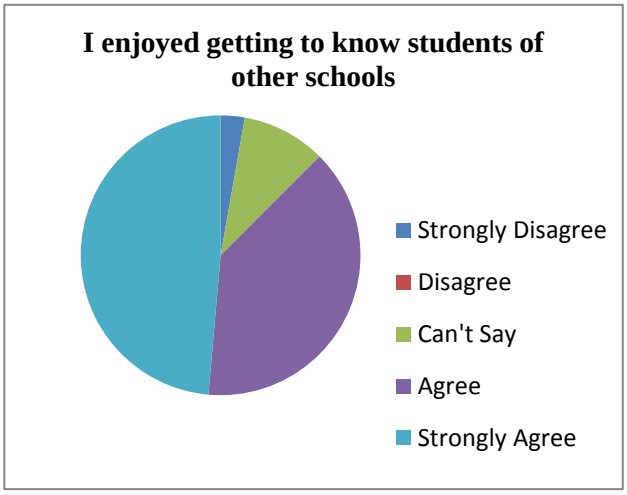

I asked questions because of chocolates
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

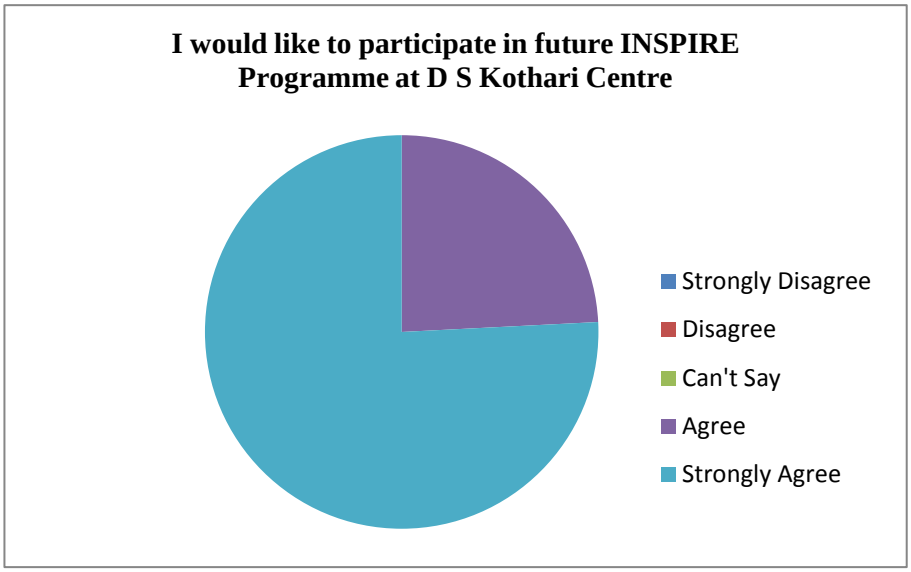

I was given an opportunity to air my opinions
Strongly Disagree
Disagree
Can't Say


The organization of the workshop was good
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree


The refreshments and meal were appropriate
Strongly Disagree
Disagree
Can't Say


The resource team was very helpful
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree


I enjoyed getting to know students of other schools
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree


I would like to participate in future INSPIRE Programme at D S Kothari Centre
Strongly Disagree
Disagree
Can't Say
Agree
Strongly Agree

INSPIRE INTERNSHIP PROGRAMME 2015

D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi
13-17 July 2015

Feedback and Review Form

Your honest assessment of how well this programme has proceeded and how successful it has been in achieving its objectives will help us in planning further programmes. Please rate the following statements on a scale of five:

	Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
1.	I learnt several new things.					
2.	I found the lectures interesting.					
3.	This programme has motivated me to pursue science when I join college.					
4.	I found the hands-on sessions very useful.					
5.	I found the hands-on sessions very exciting.					
6.	I got ample opportunity to ask questions.					
7.	The speakers spoke at a level that we could understand even when they presented advanced topics.					
8.	I like the demonstrations presented.					
9.	I feel motivated to improve my own understanding of science.					
10.	I enjoy working on projects and the programme has given me ideas on what to do.					
11.	The hands-on sessions had no relevance to schools science and were a waste of time.					
12.	I have made up my mind to pursue science as a career.					
13.	I think the working cooperatively with fellow students is fun and enhances my understanding of science.					
14.	The programme has challenged me to think.					
15.	I understand now that learning science with innovative					

	Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
	strategies can help me to understand concepts better.					
16.	I would like to start using computer-based tools much more than I have been doing so far.					
17.	The eventual success of this program will depend on the level of my own motivation.					
18.	I learnt several new concepts.					
19.	I asked questions because of chocolates.					
20.	I was given an opportunity to air my opinions.					
21.	The organization of the workshop was good.					
22.	The refreshments and meal were appropriate.					
23.	The resource team was very helpful.					
24.	I enjoyed getting to know students of other schools.					
25.	I would like to participate in future INSPIRE Programmes at D S Kothari Centre					

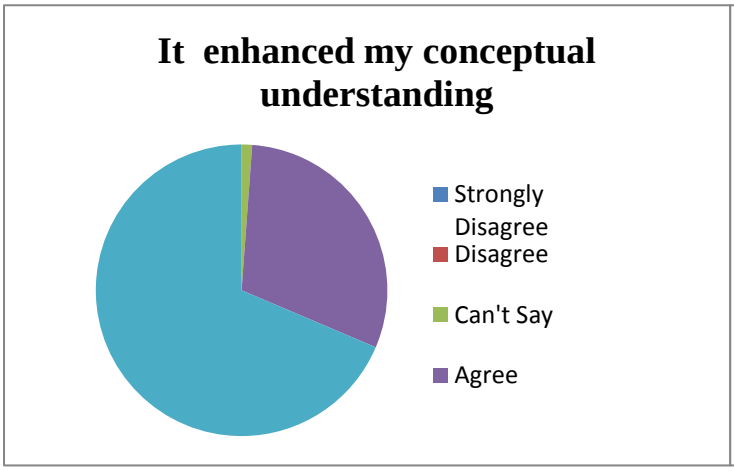
Workshop Evaluation

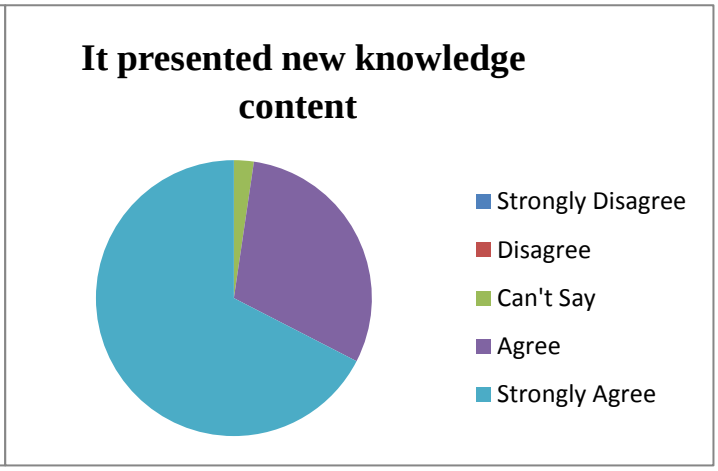
	Workshop Name:					
	Statement	**Strongly Disagree**	**Disagree**	**Can't Say**	**Agree**	**Strongly Agree**
	It enhanced my conceptual understanding.					
	It presented new knowledge content.					
	The presentations were well organized.					
	The experimental setups were novel.					
	Any other comment					

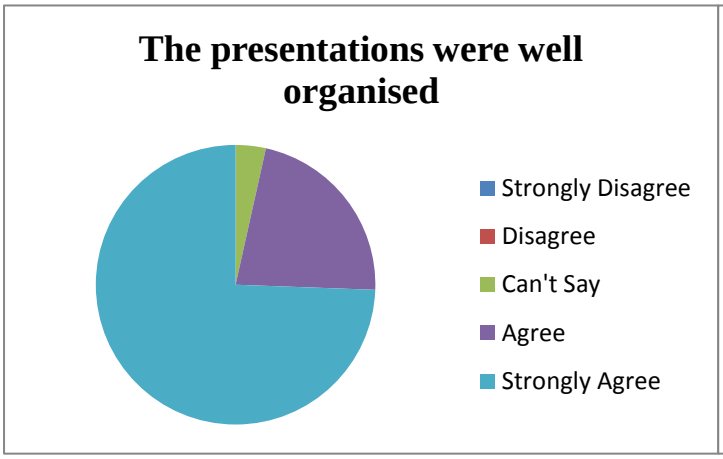
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

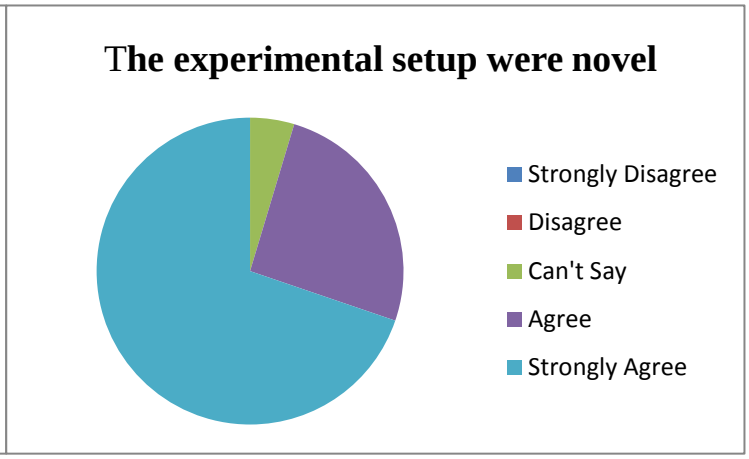
Feedback on Workshops
The Cell: Life's Playground
(The response of 86 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	1	26	59
It presented new knowledge content	0	0	2	26	58
The presentations were well organized	0	0	3	19	64
The experimental setups were novel	0	0	4	22	60





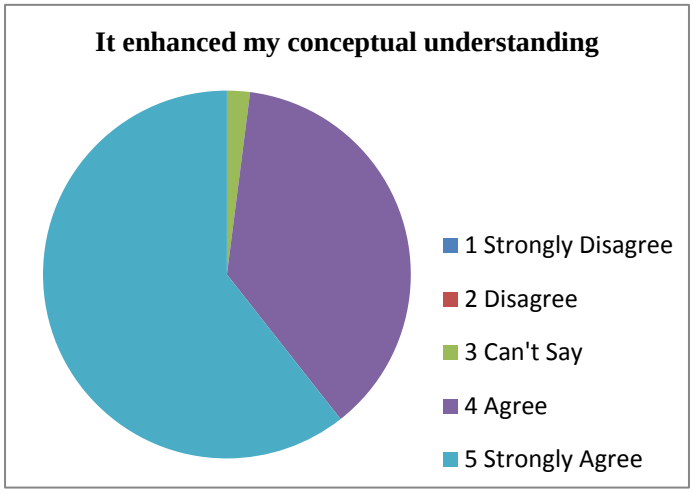


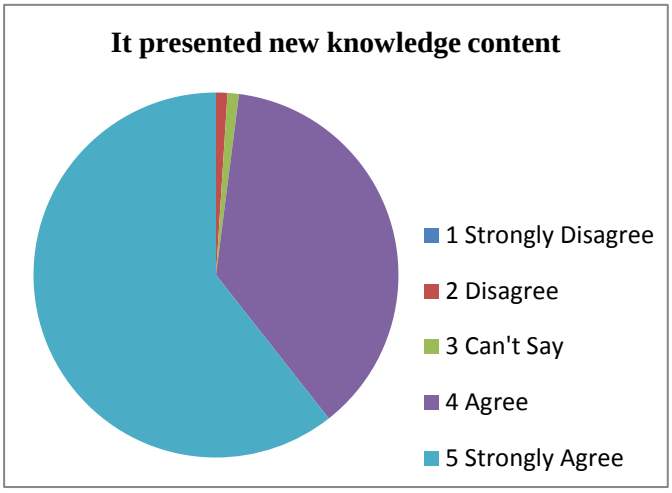


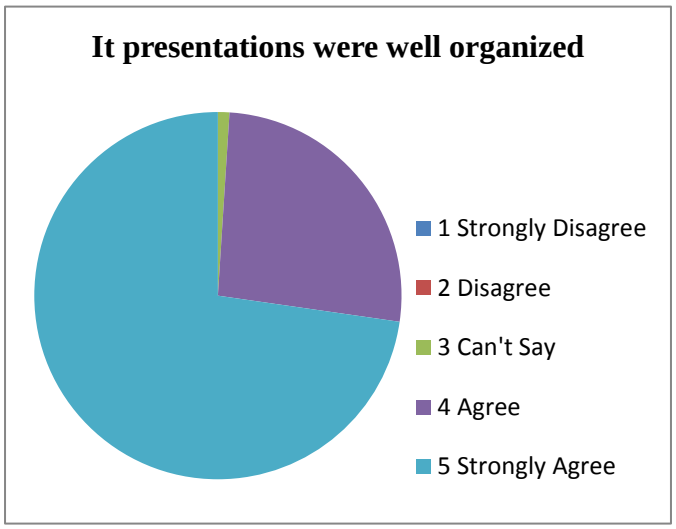
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

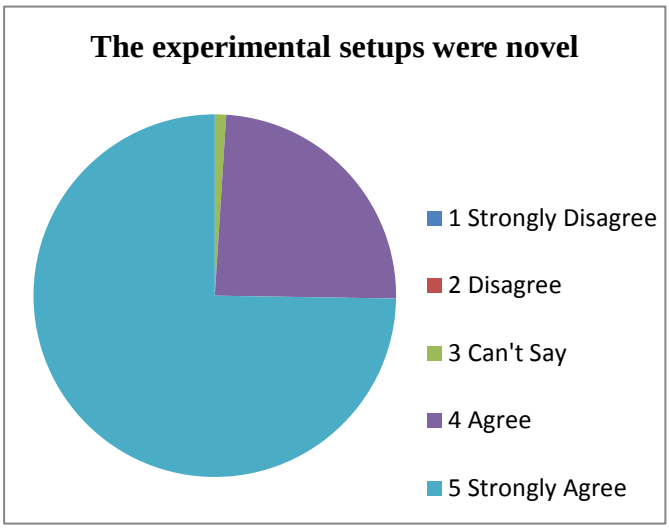
Feedback on Workshops
Kites in Capital: Urban Ecology of the Commonest Raptor
(The response of 100 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	2	37	60
It presented new knowledge content	0	1	1	37	60
The presentations were well organized	0	0	1	26	72
The experimental setups were novel	0	0	1	24	74





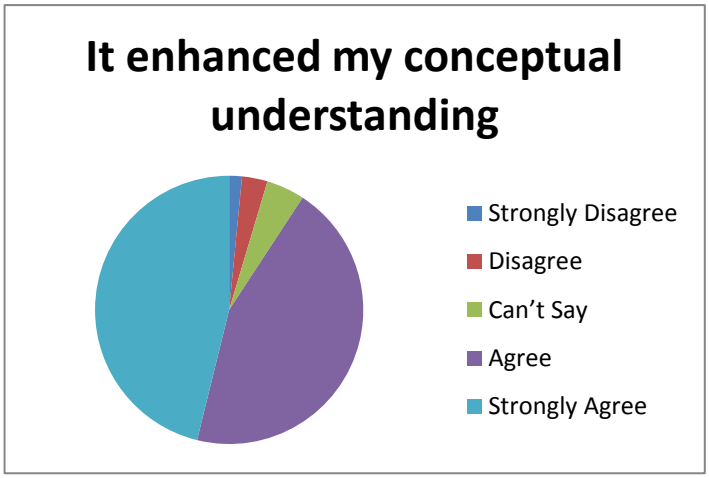


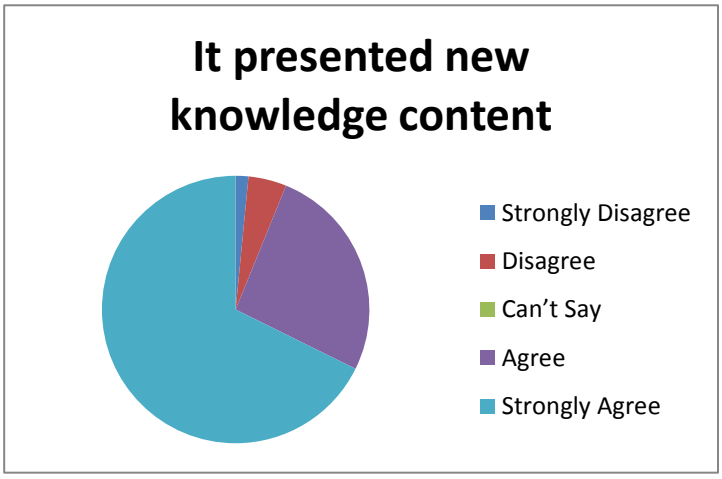


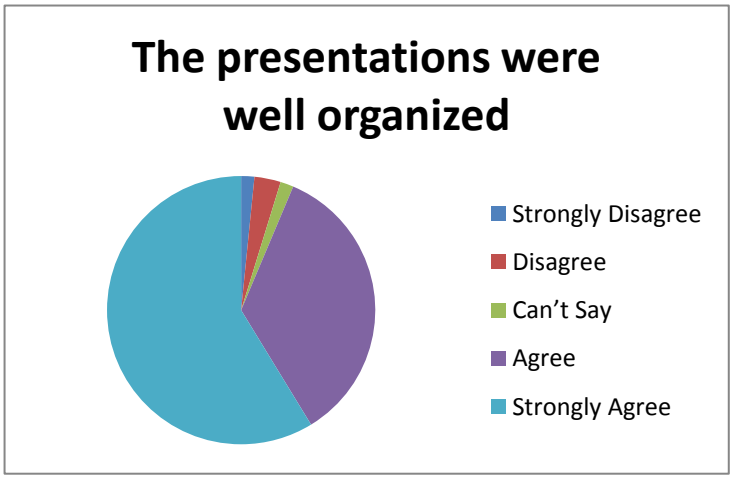
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

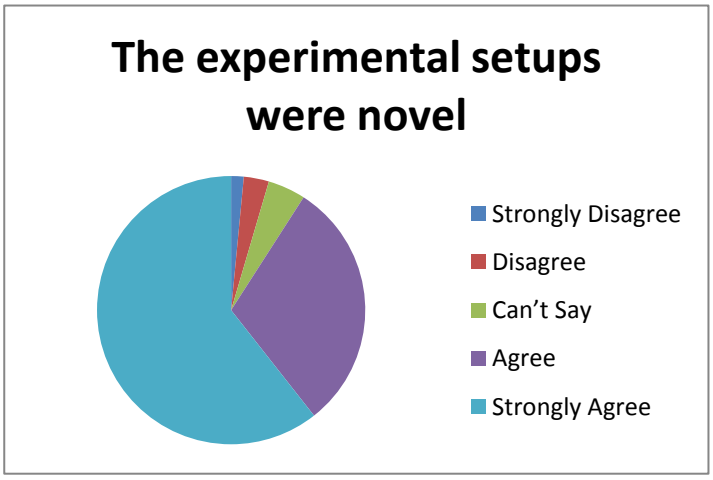
Feedback on Workshops
DNA and Enzymes
(The response of 65 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	1	2	3	29	30
It presented new knowledge content	1	3	0	17	44
The presentations were well organized	1	2	1	22	37
The experimental setups were novel	1	2	3	20	40







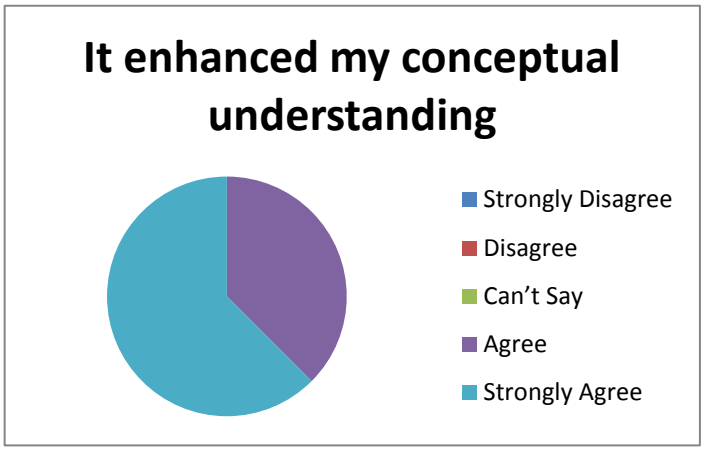


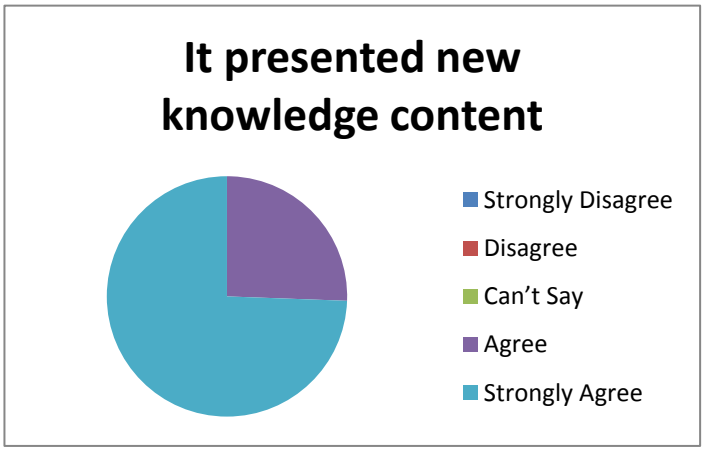
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

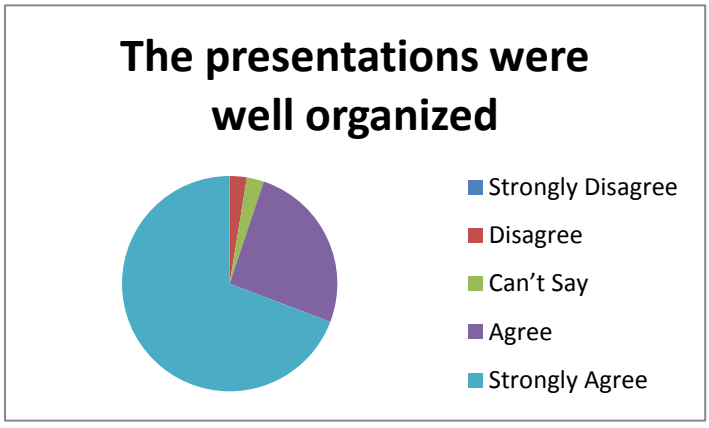
Feedback on Workshops
Designing Life: Small Experiments

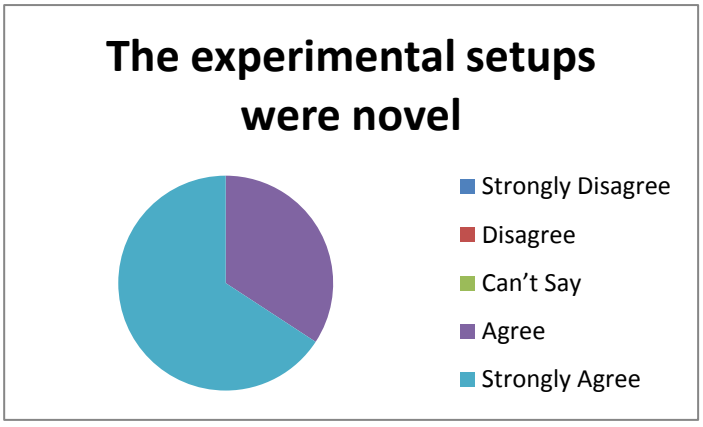
(The response of 60 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	0	18	30
It presented new knowledge content	0	0	0	11	32
The presentations were well organized	0	1	1	10	27
The experimental setups were novel	0	0	0	13	25







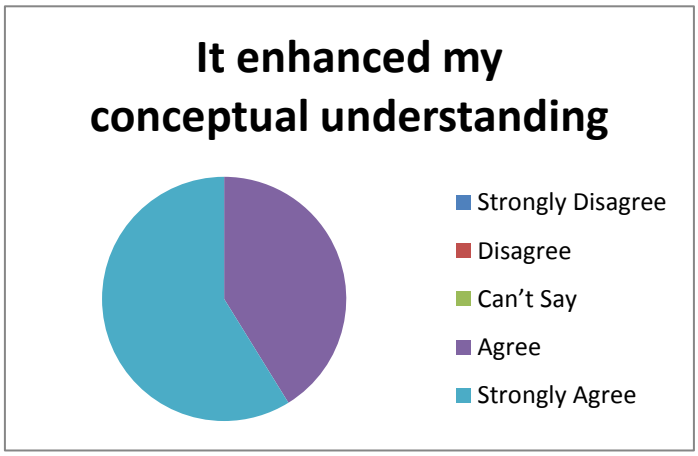


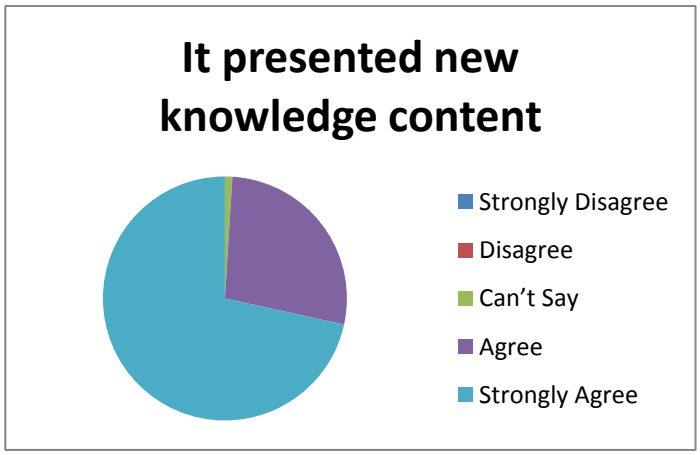
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

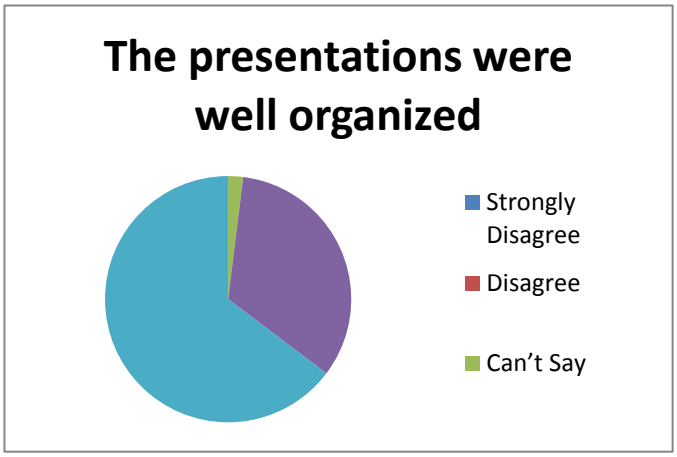
Feedback on Workshops
Simulations and Video Analysis: The Modelling Game

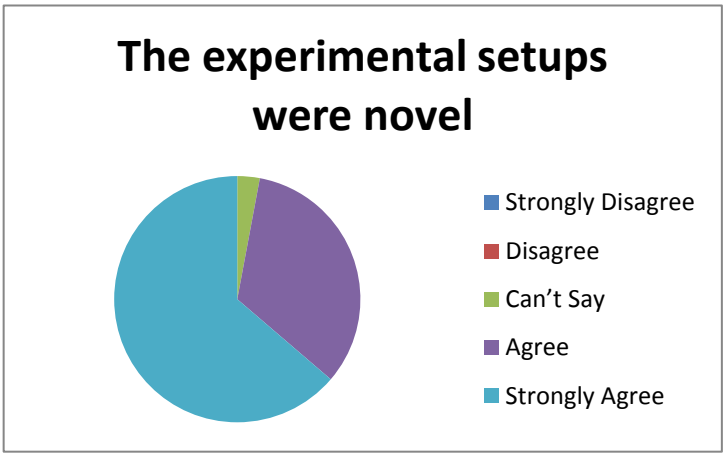
(The response of 102 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	0	42	60
It presented new knowledge content	0	0	1	28	73
The presentations were well organized	0	0	2	34	66
The experimental setups were novel	0	0	3	34	65







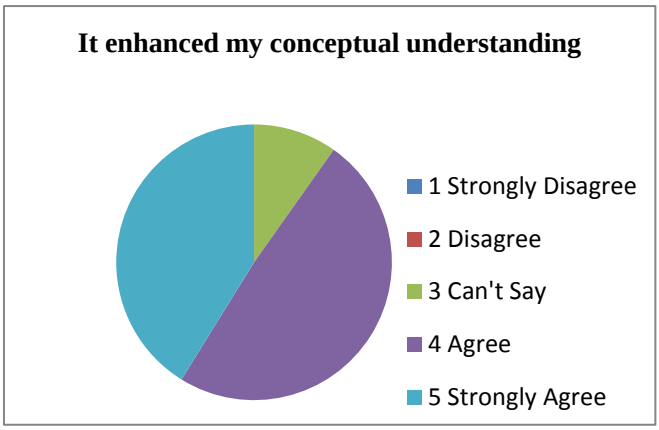


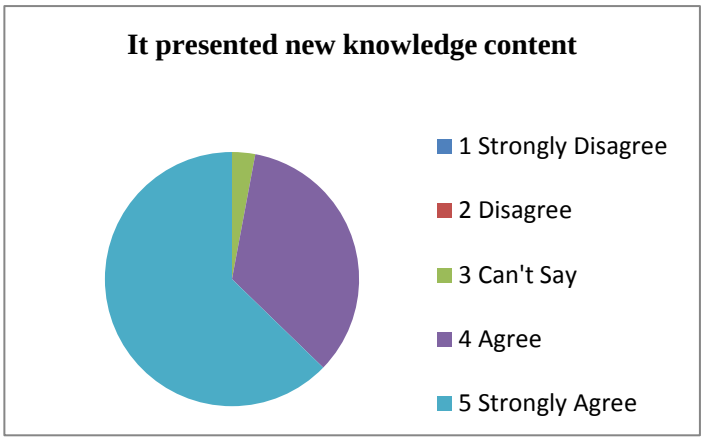
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

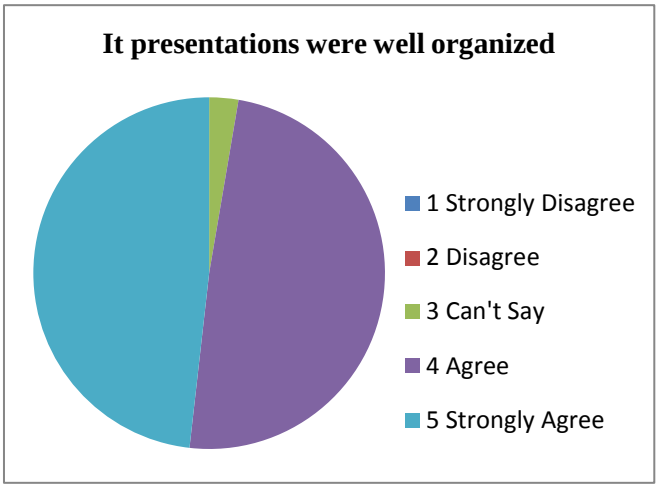
Feedback on Workshops
Remote Sensing : Map Your Environment

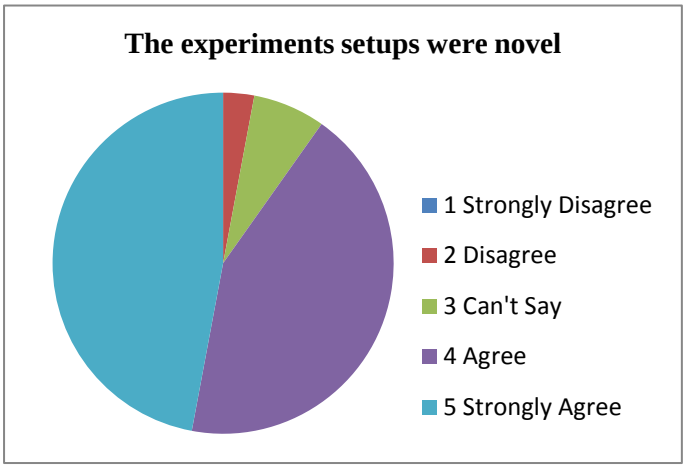
(The response of 112 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	10	50	42
It presented new knowledge content	0	0	3	35	64
The presentations were well organized	0	0	3	55	54
The experimental setups were novel	0	3	7	44	48







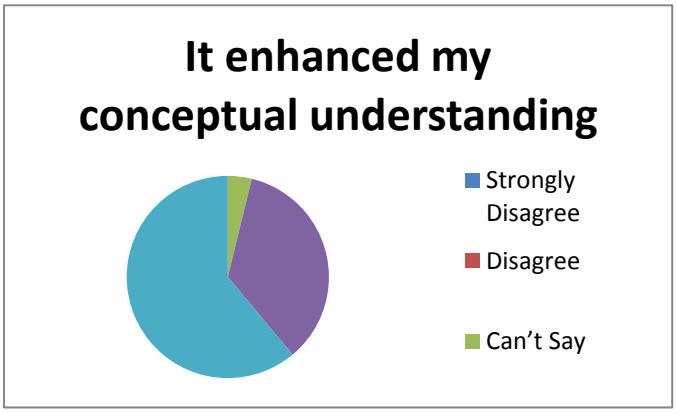


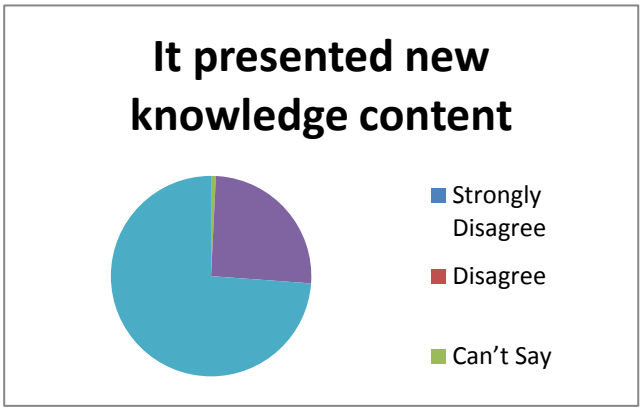
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

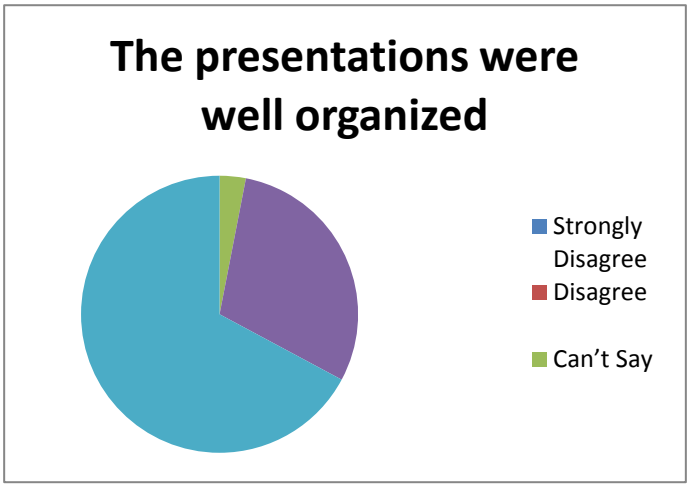
Feedback on Workshops
Colours of Gold and Silver

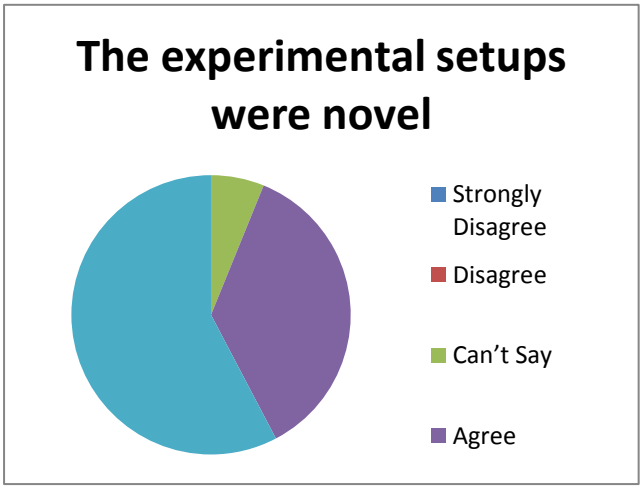
(The response of 130 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	5	46	80
It presented new knowledge content	0	0	1	33	96
The presentations were well organized	0	0	4	39	88
The experimental setups were novel	0	0	8	47	75







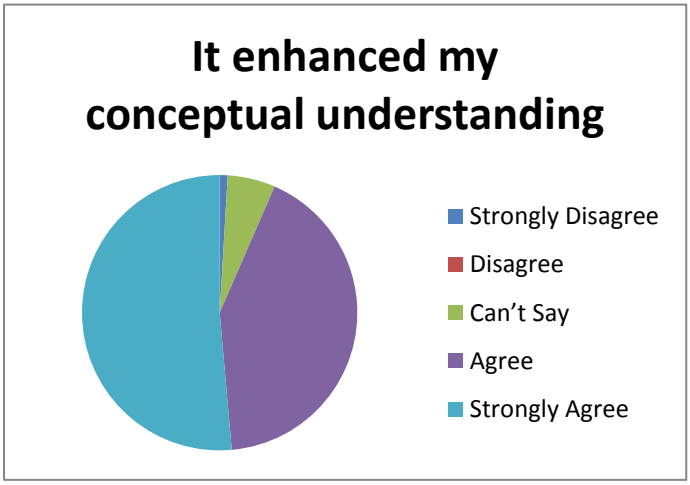


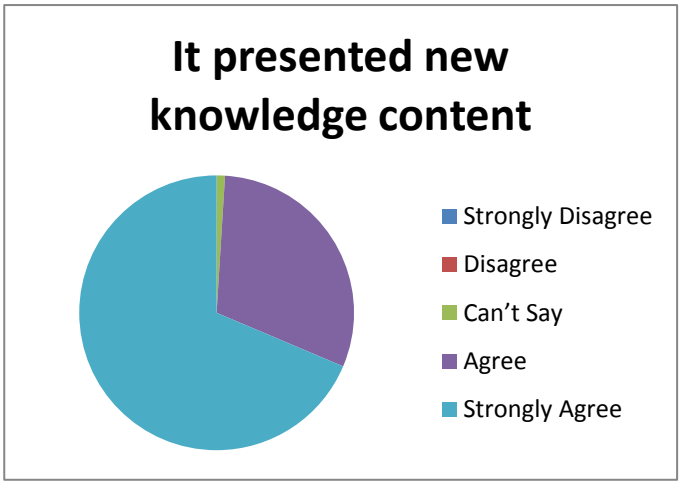
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

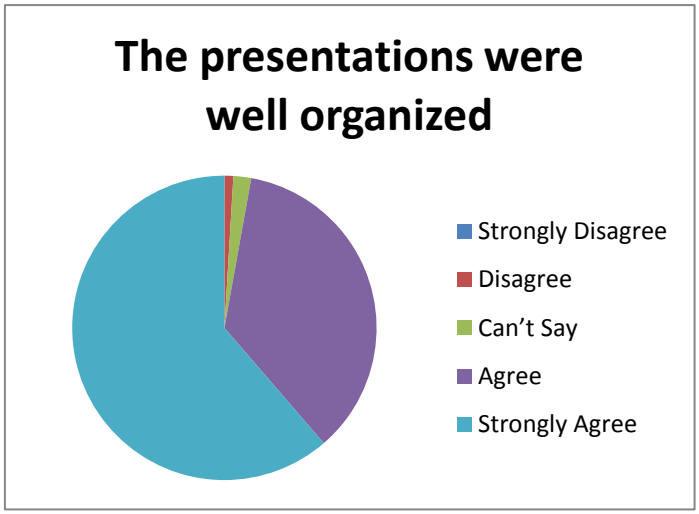
Feedback on Workshops
Green Pathways

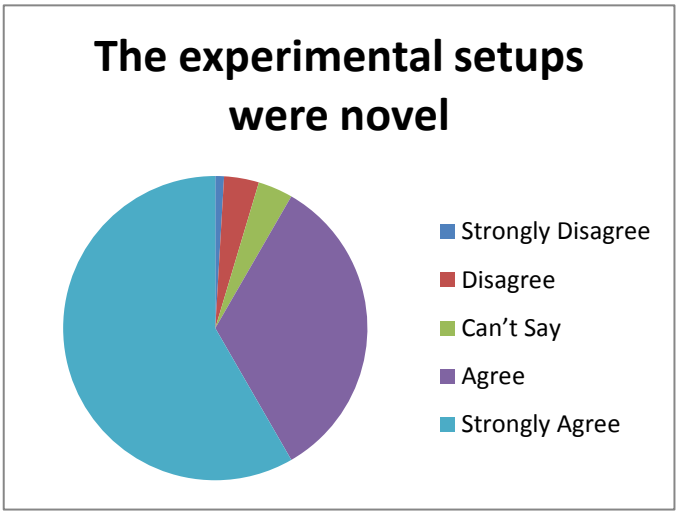
(The response of 110 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	1	0	6	45	55
It presented new knowledge content	0	0	1	31	70
The presentations were well organized	0	1	2	38	65
The experimental setups were novel	1	4	4	36	63







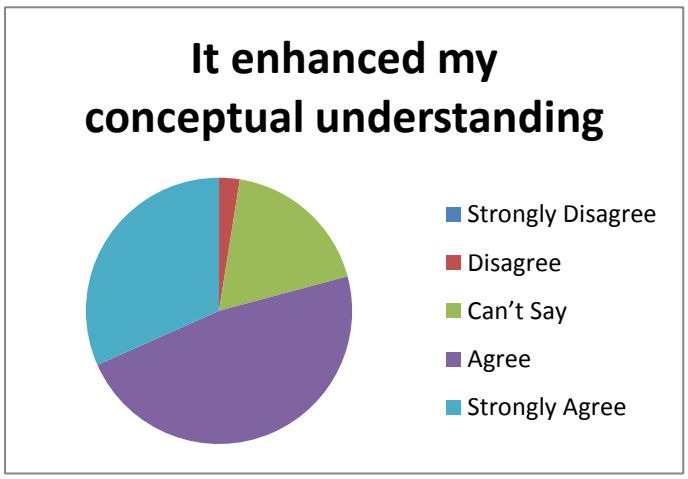


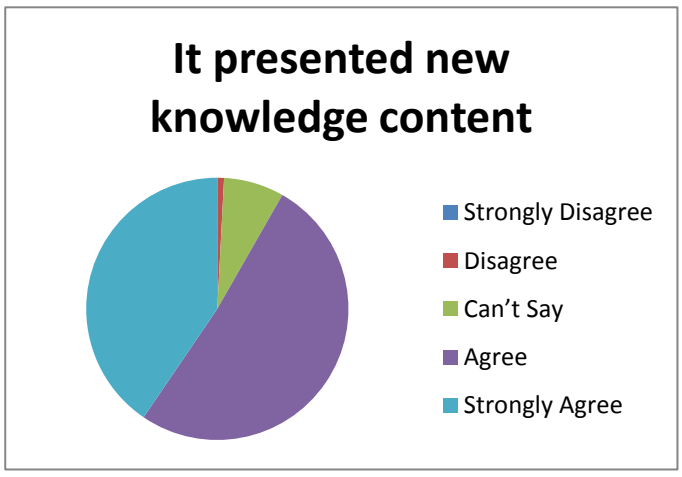
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

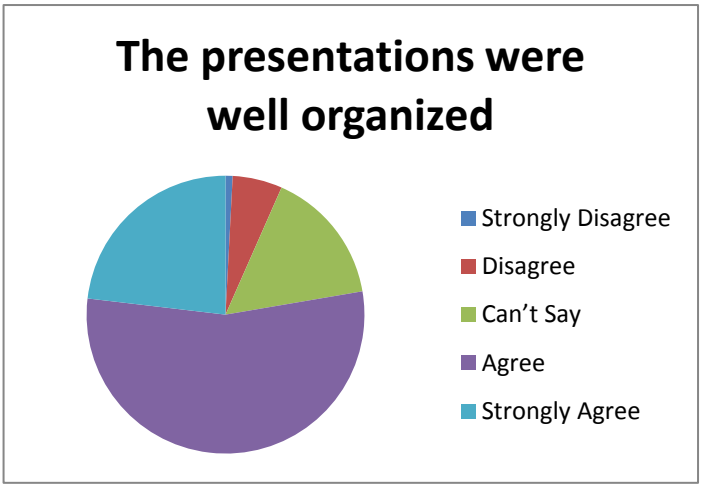
Feedback on Workshops
The World of Molecules

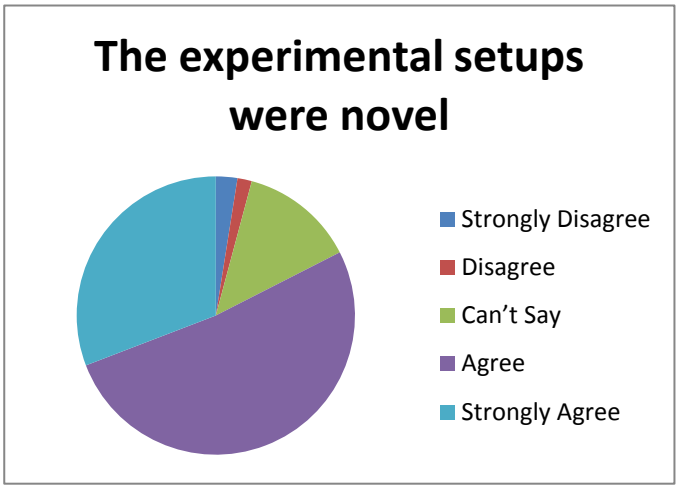
(The response of 125 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	3	22	57	38
It presented new knowledge content	0	1	9	62	49
The presentations were well organized	1	7	19	66	28
The experimental setups were novel	3	2	16	62	37







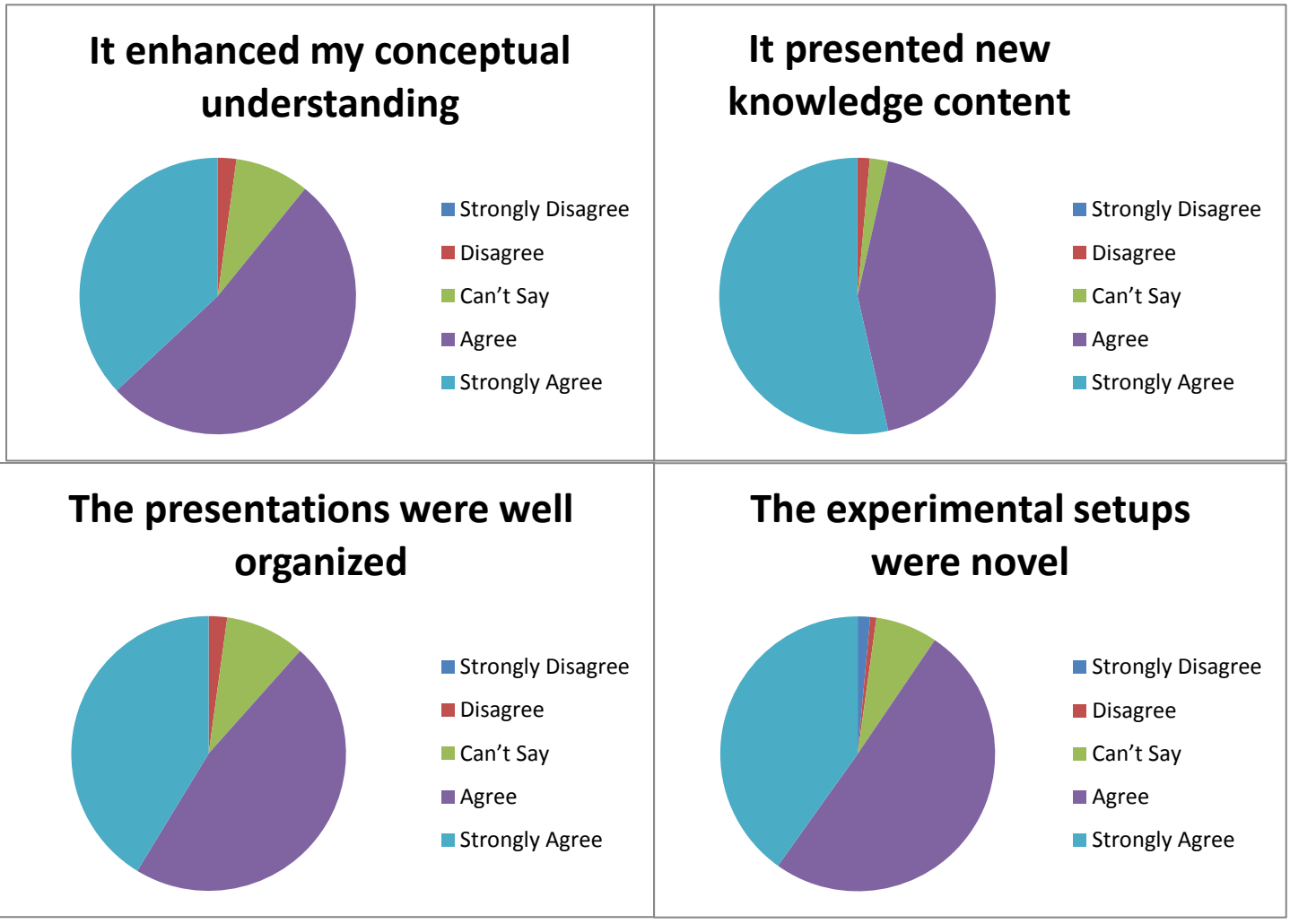


INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

Feedback on Workshops
Going Green

(The response of 140 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	3	12	72	51
It presented new knowledge content	0	2	3	60	75
The presentations were well organized	0	3	13	65	57
The experimental setups were novel	2	1	10	69	55

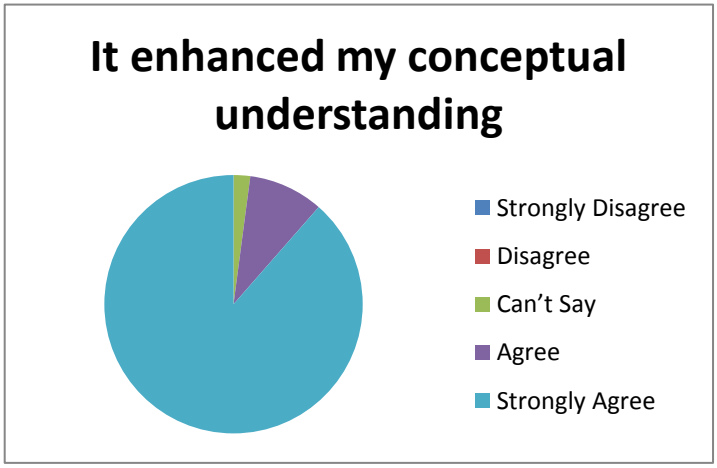


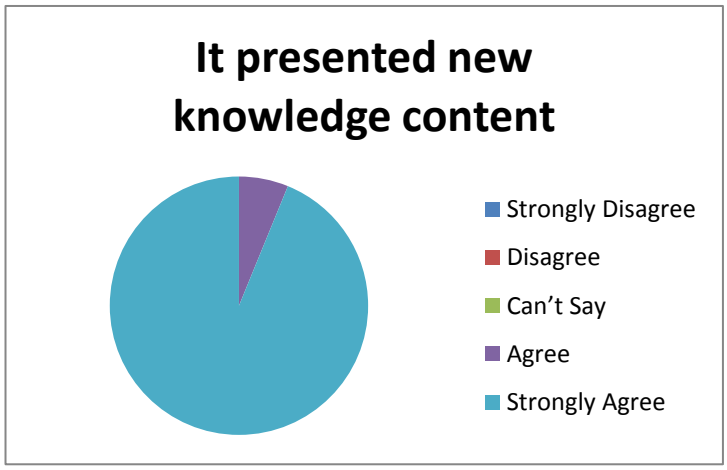
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

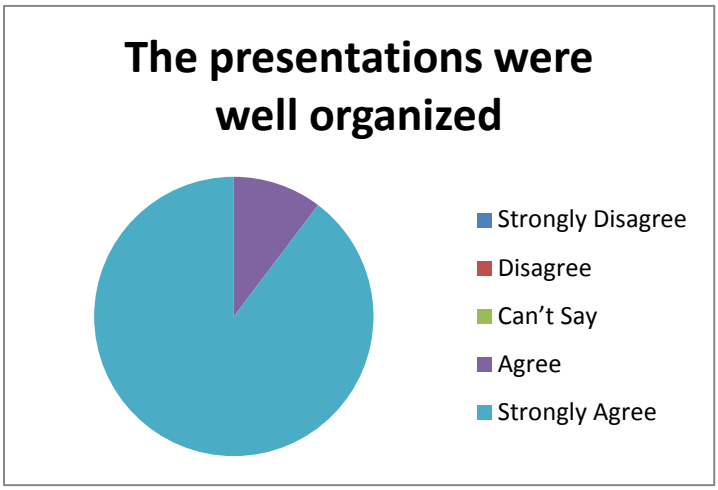
Feedback on Workshops
Forensic: To Catch a Thief

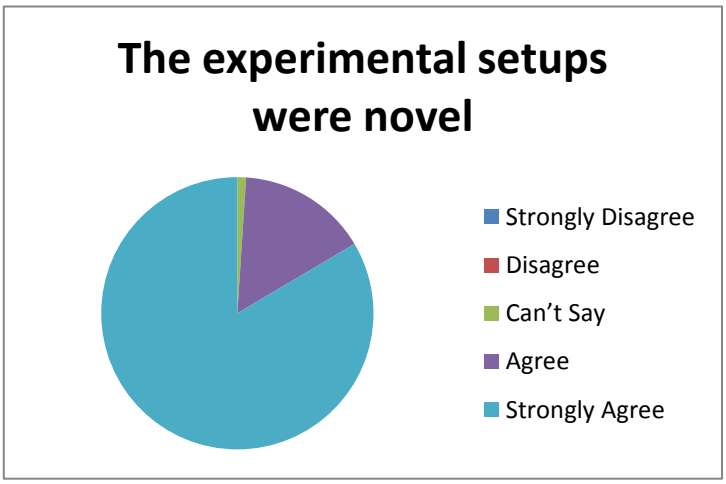
(The response of 100 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	2	9	85
It presented new knowledge content	0	0	0	6	91
The presentations were well organized	0	0	0	10	87
The experimental setups were novel	0	0	1	15	81







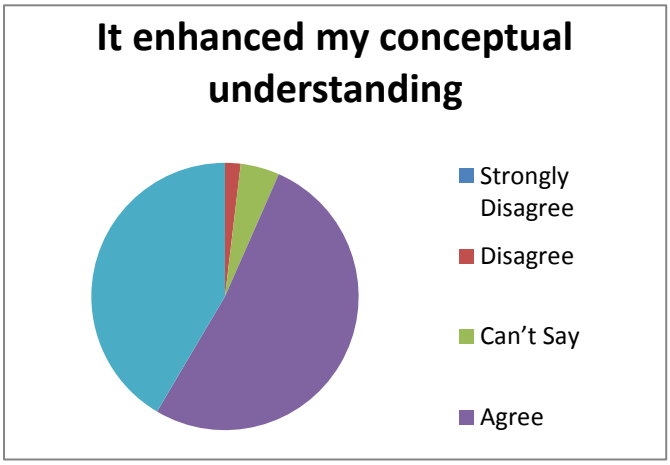


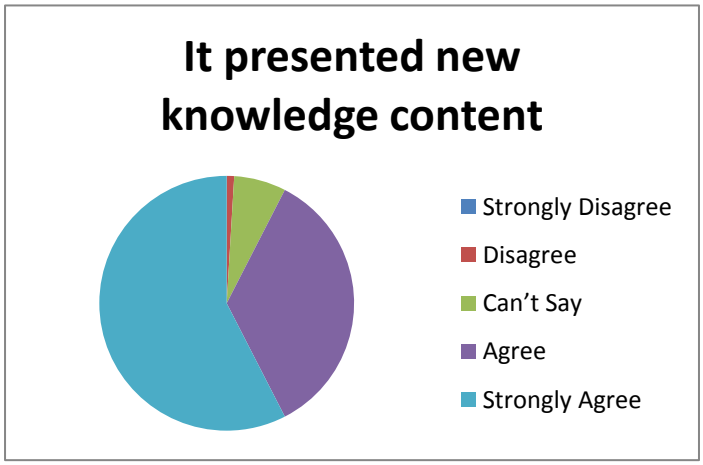
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

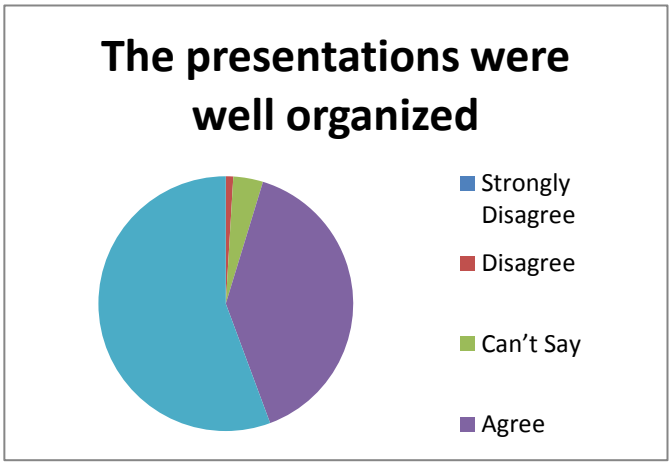
Feedback on Workshops
World in Motion

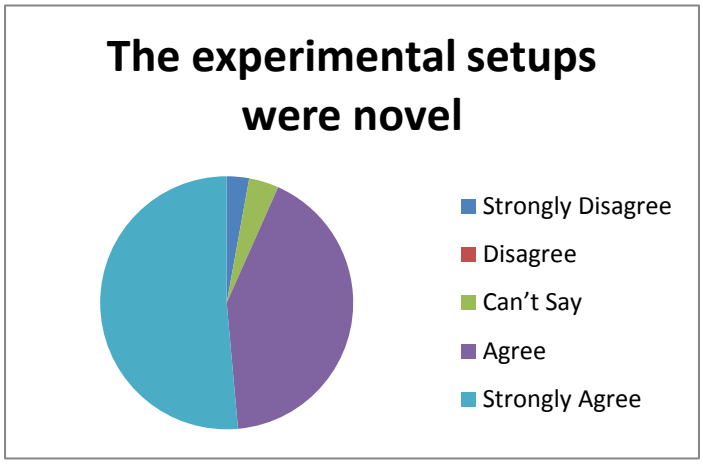
(The response of 110 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	2	5	55	44
It presented new knowledge content	0	1	7	37	61
The presentations were well organized	0	1	4	42	59
The experimental setups were novel	3	0	4	44	54







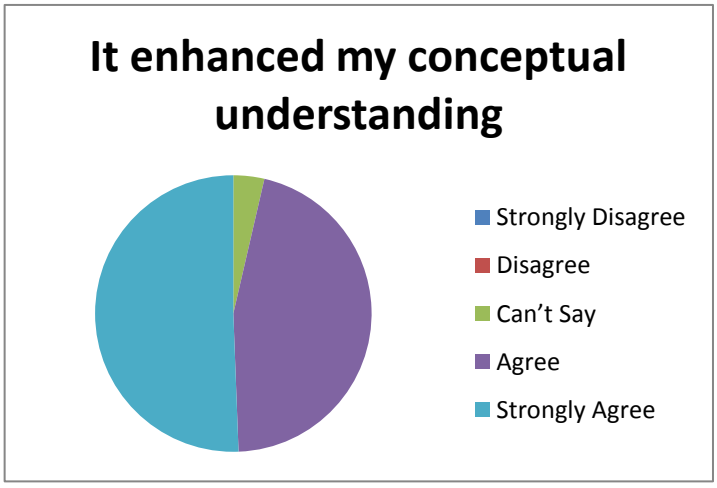


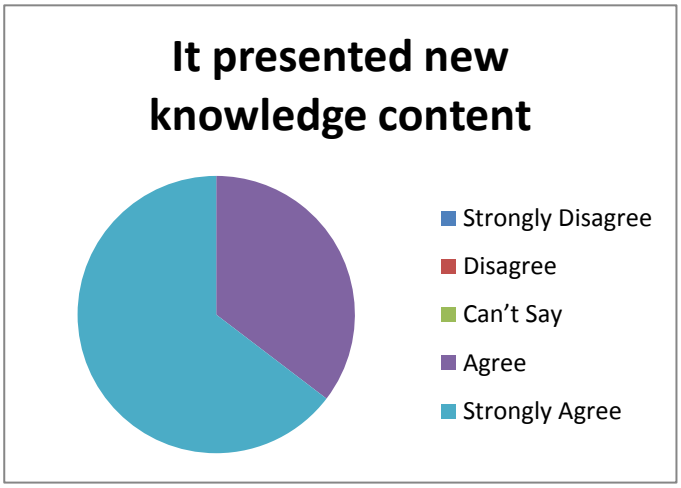
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

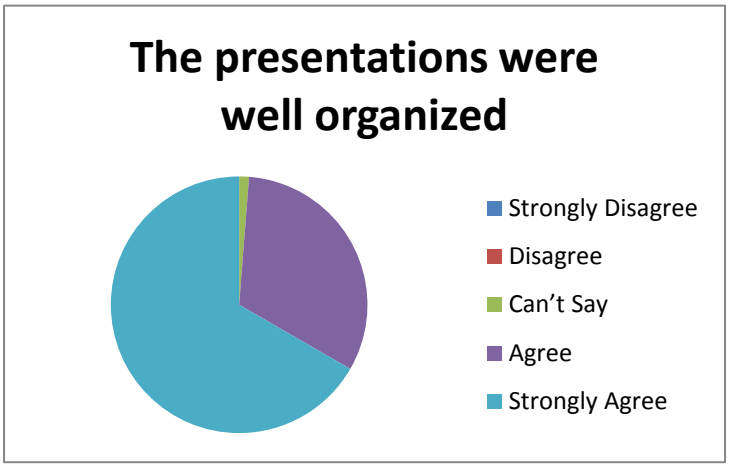
Feedback on Workshops
Sense, Measure and Control the World

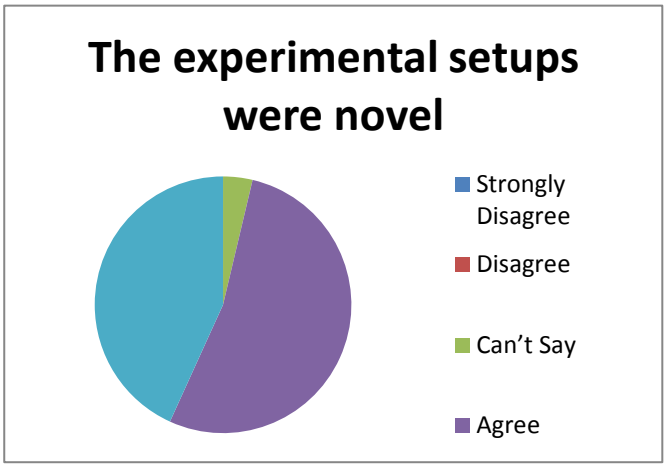
(The response of 80 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	3	38	42
It presented new knowledge content	0	0	0	29	53
The presentations were well organized	0	0	1	26	54
The experimental setups were novel	0	0	3	43	35







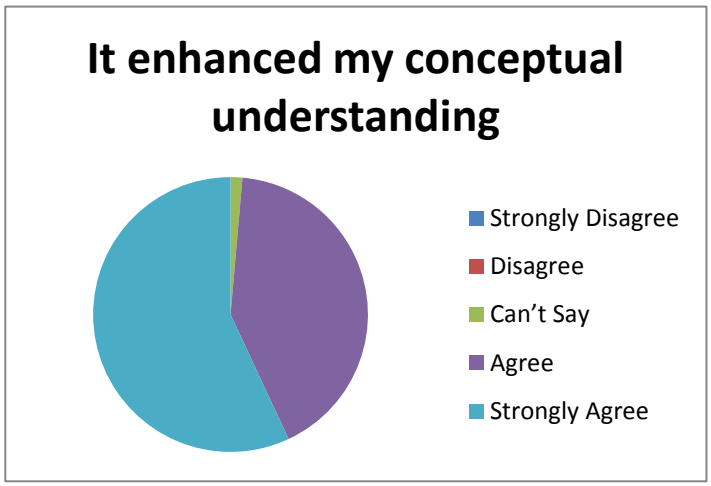


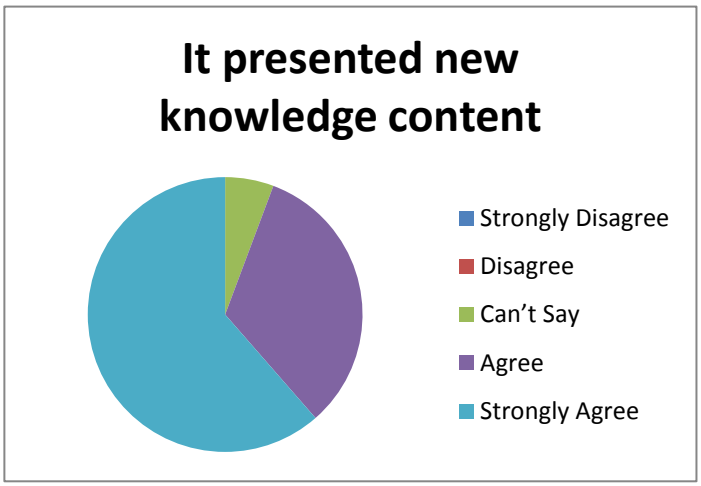
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

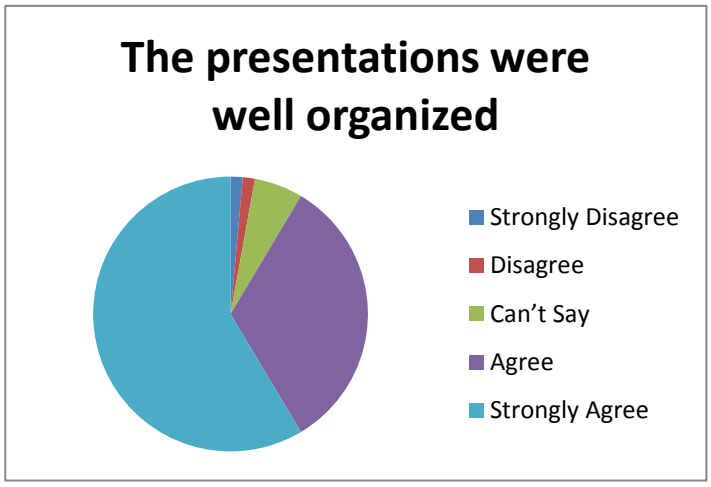
Feedback on Workshops
Amusement Park Physics

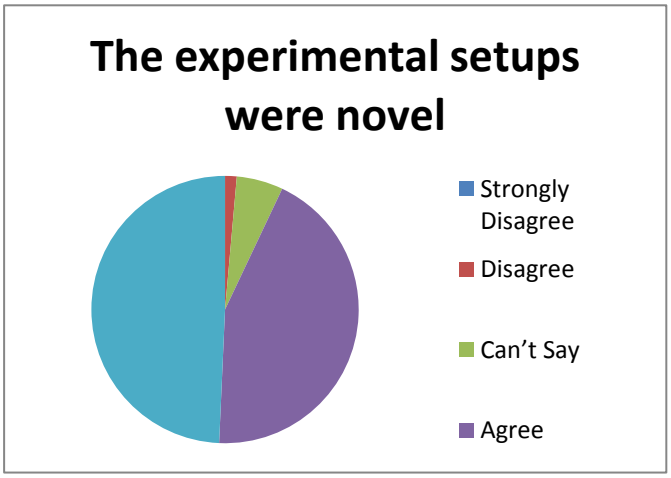
(The response of 75 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	0	1	30	41
It presented new knowledge content	0	0	4	23	43
The presentations were well organized	1	1	4	23	41
The experimental setups were novel	0	1	4	31	35







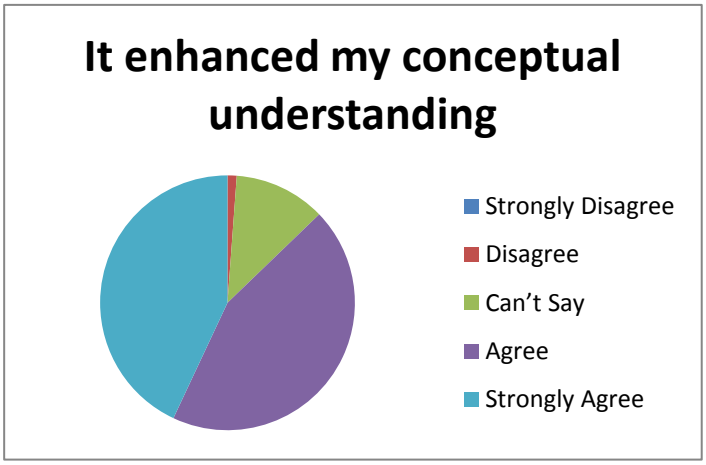


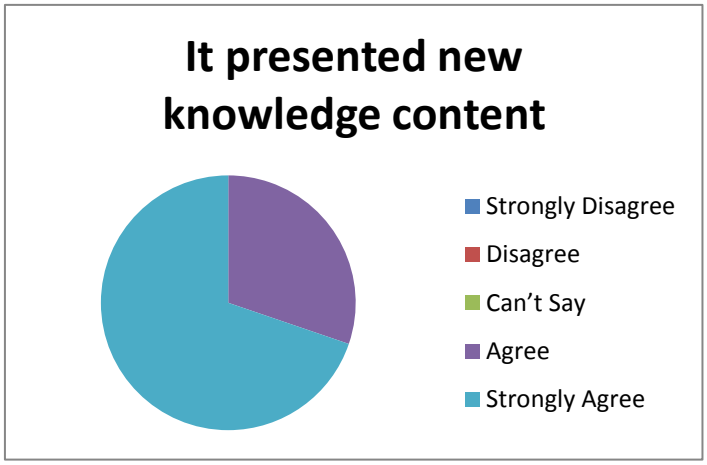
INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015

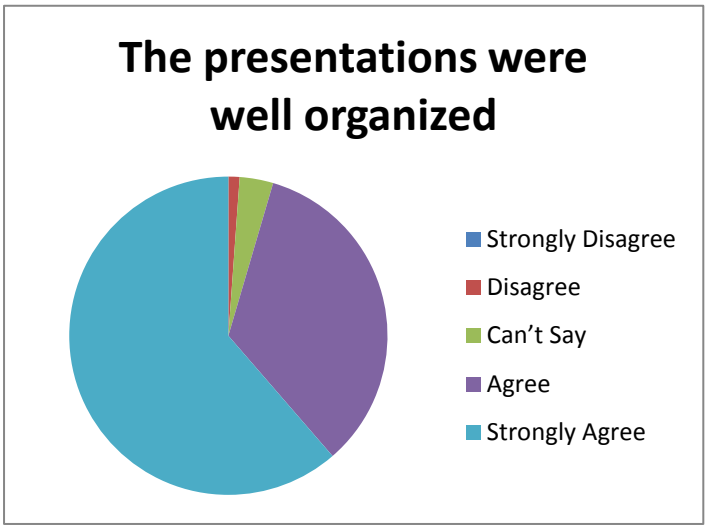
Feedback on Workshops
Robotics

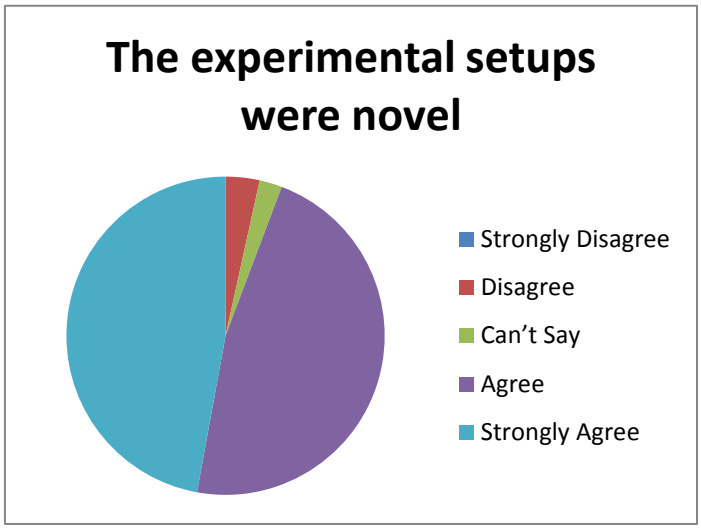
(The response of 85 students who filled the feedback forms)

Statement	Strongly Disagree	Disagree	Can't Say	Agree	Strongly Agree
It enhanced my conceptual understanding	0	1	10	38	37
It presented new knowledge content	0	0	0	26	60
The presentations were well organized	0	1	3	30	54
The experimental setups were novel	0	3	2	41	41









INSPIRE INTERNSHIP PROGRAM 2015
13 – 17 July 2015
Student Feedback on Chemistry Workshops

FEEDBACK ON WORKSHOP

GREEN PATHWAY

- Experiments were awesome and were well presented. I learnt a lot from them. I also got a wonderful opportunity to perform them.
  Anjali
  KV Andrews Ganj
- Nidhi , Kavita and Neha interacted with us well and I got to gain lot of knowledge about chemistry.
  Shivangi
- Great experience and best among the ones we attended by now.
  Akshat aggarwal
  Bal Bharati Public School, Rohini
- Bang on!!!!!
- It was interesting.
  Manvi
  KV Sainik Vihar
- Today I learnt many new things.
  Vibhav Kumar Ojha
  KV Andrews Ganj
- It was fantastic . I will try to use it at the individual level.
  Akanksha Ray
  KV No. 1 Delhi Cantt.
- The interns did their job really well. Everything was presented in a novel way.
  Ishita Aman
  Apeejay School
- It increased my interest in chemistry
  Alakh Niranjan
- This workshop developed my interest in chemistry and motivated me to deepen my knowledge in pratical chemistry.
  Himanshu Shukla
  KV No. 3 Delhi Cantt.
- This workshop presented extremely new and interesting information and will inspire us to bring about a change.
  Jahnavi Toshniwal
  Vasant Valley School
- Green pathway is really an innovative step towards green and safe chemistry which will ensure better future.
  Anisha Gupta
  DL DAV, Pitampura
- Well organised and informative.
  Amandeep Jhakkar
  KV No. 3 Delhi Cantt.
- Excellent and one the best experience during my school studies.
  Saswat Kumar
  KV No. 2 Delhi Cantt.

- Enhanced my knowledge.
  Shruti
  KV Andrews Ganj
- Learnt a lot from experiments.
  Muskan
  KV Andrews Ganj
- Strongly inclined me towards practising green chemistry.
  Yash Garde
  Vasant Valley School
- Eco – friendly and interesting.
  Manao Moirangthem
  DPS Mathura Road
- Understandable and definitely enhanced my knowledge.
  Aastha Upadhyaya
  KV Sainik Vihar
- I hope to carry this concept to my school.
  Nikita
  Vasant Valley School
- Workshop started at 2:00. We had to wait for a long time.
  Saksham Puri
- Experiments were really nice and interesting. Doing everything with proper guidance was really awesome. I would like to visit again.
  Bharti Pragat
  KV Andrews Ganj

COLOURS OF GOLD AND SILVER

- Good experience by all and wonderful experiments.
  Aditi
  KV , No. 2 Delhi Cantt.
- Inspired me a lot.
  Nitish Arya
- Well explained by mentors but lack of space and extreme heat in the room.
  Ankita Paul
  KV, No. 2 Delhi Cantt.
- Nicely executed.
- Nice, good knowledge. New things to learn.
  Sanchit Jain
  KV Paschim Vihar
- Very nice presentation. I got a nice chance of learning new and amazing things.
- Great experience, wonderful faculty and awesome experiments.
  Rohan Gupta
  Bal Bharati Public School , Rohini
- Things which were taught to us were very interesting. Science became fun. Teachers were interactive.
  Abhishek Gautam
  KV Vikaspuri
- Got to learn a lot and apparatus were supercool.
  Arpit Behera
  The Mothers International School
- Excellent. Had a nice experience.
  Ashutosh
  KV No. 2 Delhi Cantt.
- Very nice demonstration.
  Saswat Kumar
  KV No. 2 Delhi Cantt.
- A very well organised laboratory.
  Vasu Malhotra
  Cambridge School
- Interesting concepts and innovative ideas and experiments.
  DSV Sindhuja
  KV Vigyan Vihar
- It was very interesting and had a wonderful experience.
  Mansi Malik
  KV Sainik Vihar
- Experiments were very different and interesting. More importantly they were explained very well.
  Nikita Dhawan
  Vasant Valley School

- This was a great assortment of diverse experiments. Learnt a lot and concepts were explained very well.
  Yash Garde
  Vasant Valley School
- Reactions we observed were really fascinating and provided scope for us to perform ourselves.
  Jahnavi Toshniwal
  Vasant Valley School
- It was really colourful and amazing.
  Manao Moirangthem
  DPS Mathura Road
- Difficult concepts were explained well.
  Ravi Kumar Jha
  KV Tughalakabad
- All these experiments were new to me and I learned a lot from them.
  Rakhi
  KV Pushp Vihar
- New experiments were done and excellent atmosphere.
  Raj
  KV Vikaspuri
- Gold nanoparticles were the best.
  Rohit
  KV No. 2 Delhi Cantt.
- It was an amazing experience.
  Arpit
  KV Shalimar

DNA AND ENZYMES

- Very interesting and enjoyable workshop. Enhanced my knowledge a lot.
  Md. Aamir
  Kendriya Vidyalaya no. 1, Delhi Cantt.
- The experiments setup by the mentors were amazing. I enjoyed a lot and also learned new things. It was very wonderful experience.
  Anjali
  Kendriya Vidyalaya, Andrews Ganj
- There are a lot of different kind of machines which we haven't seen in our schooland presented us a new world.
  Vasu Malhotra
  Cambridge School
- I enjoyed the experiments very much. Our mentor explained us really very well. They helped us.
  Bharti Phogat
  Kendriya Vidyalaya, Andrews Ganj
- Realistic and detailed.
  Ishav Lohia
  Kendriya Vidyalaya no.1, Delhi Cantt.
- I liked the enzyme acting based experiments.
  Prabhu Dutt
  Kendriya Vidyalaya no.1, Delhi Cantt.
- All mentors were awesome. Great help.
  Sambhav Jain
  Cambridge School
- This was the most interesting workshop I have attended.
  Animesh Barna
  Cambridge School
- Excellent experiments, understoodable mentors, exciting instruments. Pleasure to visit.
  Ankita Paul
  Kendriya Vidyalaya no.2, Delhi Cantt.
- It was an enjoyable workshop. Very interesting and increased my understanding.
  Ipshita Ghoshal
  Kendriya Vidyalaya, Andrews Ganj
- It was very interesting. I enjoyed it. Ienhanced my knowledge. It provided me a new opportunity. The volunteers were very good.
  Sandipa
  Kendriya Vidyalaya, Andrews Ganj
- It made possible me to glimpse of the basic structure of our body. Whole new experience.
  Himanshu Shukla
  Kendriya Vidyalaya no.3, Delhi Cantt.
-

- It increased my visual knowledge.
  Alakh Niranjan
  Kendriya Vidyalaya no.3, Delhi Cantt.
- It was amazing to see the microscopic world of DNA and how to work backwards to get down to the smallest size.
  Yash Garde
  Vasant Valley School
- It was nice to attend zoology workshop. In fact I am not a biology student but still I am understanding the concepts here.
  Astha Kukreti
  Kendriya Vidyalaya no.2 , Hindan
- Very interesting experiments. Wish there was a little more time.
  Manasvi Sharma
  Mother's International School
- We actually do not know about the concepts and terminologies hence some of the experiments can make only a light shade in our mind.
  Manisha kumari
  Kendriya Vidyalaya no.2 , Hindan

THE CELL : LIFE'S PLAYGROUND

- I am not a student of biology but it was interesting learning and performing experiments with teacher.
  Nisha
  Kendriya Vidyalaya
- This way to enhance our understanding and practical skills is really awesome.
  Pallavi
  Kendriya Vidyalaya, Shalimar Bagh
- It was very interesting . Loved to attend the classes. The explanations were very good and I enjoyed making the slides.
  Ipshita
  Kendriya Vidyalaya, Andrews Ganj
- It was very interesting. I enjoyed it very much. It was a really a thrilling experience for me to know and to prepare those slides. The volunteers helped us a lot. The volunteers helped us a lot. They were very helpful and friendly.
  Sandipa
  Kendriya Vidyalaya, Andrews Ganj
- Enhanced my knowledge. Felt very satisfied. Strong content building has been provided.
  D.S.V. Sindhuja
  Kendriya Vidyalaya, Vigyan vihar
- The time slot for the experiments could have been more so that we could master the practical techniques.
  Koushiki Chatterjee
  Kendriya Vidyalaya, Vigyan vihar
- I added new concepts in my mind experiences these experiments.
  Alakh Niranjan
  Kendriya Vidyalaya no. 3, Delhi Cantt.
- The experiments conducted were very interesting to carry out and observe.
  Jahnvi Toshniwal
  Vasant Valley School
- The workshop was very insightful and gave a lot of practical knowledge.
  Nikita Dhawan
  Vasant Valley School
- Proved that I enjoy science as a whole, Biology included!
  Yash Garde
  Vasant Valley School
- I explored whole new world of botany inspite of my school. I have gained some knowledge about nature and it's colourful component.
  Himanshu Shukla
  Kendriya Vidyalaya no.3 , Delhi Cantonment
- The mentors were very frank and the teachers' explained concepts comprehensively.
  Ravi Jha
  Kendriya Vidyalaya, Tughalakabad

- The workshop was wonderful. My mentor explained both the experiments very well. I would like to come here again.
  Bharti Phogat
  Kendriya Vidyalaya, Andrews Ganj
- The experiments performed by the mentors were amazing. I enjoyed a lot and I also got to know about different topics that comes under Botany. I was really a wonderful experience.
  Anjali
  Kendriya Vidyalaya, Andrews Ganj
- The mentors were really patient with a very kind and obedient behaviour which allowed us to ask all our questions.
  Vasu Malhotra
  Cambrige School

- The volunteers were really helping cool and way too awesome. The experiments helped me to strong my concepts. Thank You.
  Sambhav Jain
  Cambridge School
- Insect biology and understanding cells and mutation was never more fun!
  Yash Garde
  Vasant Valley School
- The experiments were very interesting and enhanced mu understanding.
  Jahnvi Toshniwal
  Vasant Valley School
- It was very interesting . I enjoyed it very much. It enhanced my knowledge. The volunteers was very good.
  Sandipa
  Kendriya Vidyalaya, Andrews Ganj
- Very fascinating for me to observe the structures of Drosophila.
  Himanshu Shukla
  Kendriya Vidyalaya no. 3, Delhi Cantt.
- It was really interesting . I learnt many things. I actually understood the concept much better. Good job!
  Animesh Barna
  Cambrige School
- I enjoyed it very much! Thank You. I learned a lot. Everyone was very helpful and friendly. Very well organised.
  Kriti Sanghi
  The Mother's International School
- It was really helpful and interesting and got to know new stuff.
  Sheena Garg
  Cambridge School
- The experiments were well an amazing. I enjoyed a lot. They told us various new things and it enhanced my knowledge. It was wonderful experience. Thank You.
  Anjali
  Kendriya Vidyalaya, Andrews Ganj
- I enjoyed the workshop very much. It enhanced my understanding.
  Bharti Phogat
  Kendriya Vidyalaya, Andrews Ganj
- Ya, Even though I am not in Biology but theh things were really interesting to add knowledge quotient.
  Vasu Goel
- Very easily understood concepts. Good presentations in nice way. Playful and innovative.
  Sonal Sharma
  Kendriya Vidyalaya, D.L. Meerut

- It enhanced my knowledge. I truly enjoyed it. It was extremely knowledgeable for me. Thanks a lot.
  Nikita
  Kendriya Vidyalya, Sainik vihar
- Very enriching and exciting display of a pile of zoological work!
  Ravi Jha
  Kendriya Vidyalaya, Tughalakabad

- Everything was fine.
  Siddhart
  KV Sainik Vihar
- It was not well presented.
  Prachi Kaushik
  KV Vigyan Vihar
- Topic was not so interesting.
  Ekta Sharma
  KV Vigyan Vihar
- It was nice . thanks for the lovely experience.
  Nikita
  KV Sainik Vihar
- ARGUSLAB Software was good for demonstration purpose.
  Prabhu Dutt
  KV No. 1 Delhi Cantt.
- Good mentors and new concepts were introduced in a nice way.
  Sonal Sharma
  KV D L Meerut
- This workshop introduced me to this fantastic software arguslab. Thanks to all the teachers and volunteers.
  Shubham Vats
  KV D L Meerut
- There were drawbacks of the software arguslab as observed and told. May look for the better software;
  Prasanna
  KV No. 1 Delhi Cantt.
- Very well presented and explained by the teachers. Amazing concepts!!!! Interesting.
  Ritika kumar
  Sri Venkateswar International School
- Helped us to see 3- D orbitals.
- Not good as the software that we used was difficult to use.
- Helped us to know more about the bonding of atoms. Concepts and experiments were amazing.
  Sheena Garg
  Cambridge School
- Some of the material was unknown and hence a bit confusing.
  Saksham Puri
  Modern Barakhamba Road
- Polite attitude of teachers.
- Very nice software.
  Ayush Aggarwal
  Bal Bharati Public School , Dwarka

- If We would have been given individual attention then concepts would have been enhanced. Otherwise it was nice.

THE WORLD IN MOTION

- Innovative ways. Presented new gadgets.
  Rahul Madan
  DL DAV Model School
- It was quite fun with motion.Lots of knowledge to gain.
  Sanchit Jain
  KV Paschim Vihar
- Great exposure to advanced technology.
  Koushiki Chatterjee
- Advanced technology was available in lab. It enhanced my knowledge.
  D.S.V. Sindhuja
  KV Vigyan Vihar
- Very much fascinated by new technology and techniques used in physics to increase our conepts in a short time span.
  Himanshu Shukla
  KV No. 3 Delhi Cantt.
- It was fantabullas.
  Alakh Niranjan
- It was very interesting and explanations were very good.
  Ipshita
  KV Andrews Ganj
- The experiments were very interesting. All the teachers and students were extremely interactive and their explanations were very good.
  Nikita Dhawan
  Vasant Valley School
- Concepts were explained very well.
  Dhruv
  Bal Bharati Public School Rohini
- Fantastic!!!! Concepts will be useful in board exams.
  Anurag Gupta
  Bal Bharati Public School Rohini
- The experiments related to motion sensing of ball were great but in case of vehicle it was hopeless.
  Akshat Aggarwal
  Bal Bharti Public School Rohini
- This workshop was nice. I liked all the experiments. Mentors explained things very well. The way of interacting was good.
  Bharti Phagat
  KV Andrews Ganj
- Mentors made the experiment interesting.
  Ravi Kumar Jha
  KV Tughalkabad

SENSE, MEASURE AND CONTROL

- The workshop was simply amazing.
  Astha Kukreti
  Kendriya vidyalaya no.2 Hindan
- Cool!
  Mansi Sharma
  Kendriya Vidyalaya no.2 Hindan
- They all explained very nicely and we got many things to learn.
  Shivangi
  Kendriya vidyalaya no.2 Delhi Cantt.
- Very nice. Well explained.
  Simran
  Kendriya vidyalaya no.2 Delhi Cantt.
- It was very nice. I truly enjoyed it. It enhanced my knowledge.
  Nikita
  Kendriya Vidyalaya Sainik Vihar
- The set up was exceptionally well and the mentors were ready to clear any doubts. All in all it was a really good workshop.
  Sonal Sharma
  Kendriya Vidyalaya Meerut
- Pretty interesting task. Enjoyed time!
  Vasu
- The experiments were very interesting and very different. I really enjoyed doing this.
  Sahara Senapati
  Kendriya vidyalaya no.2 Delhi Cantt.
- Experiments were good but were not well presented.
  Prachi Kaushik
  Kendriya Vidyalaya Vigyan Vihar
- Well presented and good concept.
  Anurag Gupta
  Bal Bharati Public School Rohini
- Good experience and faculty.
  Rohan Gupta
  Bal Bharati Public School Rohini
- Interesting and well organised in an understandable manner. I simply love it!
  Manas Moirangthem
  Delhi Public School Mathura Road
- Informative. Different from theory.
  Aastha Upadhyaya
  Kendriya Vidyalaya Sainik Vihar
- It was very interesting and have a great experience.
  Mansi
  Kendriya Vidyalaya Sainik Vihar

ROBOTICS

- Everything was very well organised and presented. Everyone was very helpful and friendly. I learned quite a lot.
  Kriti Sanghi
  The Mothers International School
- This workshop was best and most interesting than others.
  Sahara Sonapati
  KV No. 2 Delhi Cantt.
- It was too much interesting.
  Gaurangi Katharya
  KV Muradnagar
- Mentors were confident and had a great knowledge. The set up was well organised.
  Samiksha Mishra
  KV Andrews Ganj
- Awesome mentors. Nice explanation.
  Ankita Paul
  KV No. 2 Delhi Cantt.
- There should be a website for students so that they can make robots themselves.
  Govind Kumar Jha
  KV No. 1 Delhi Cantt.
- This is the best explained workshop I have attended till now.
  Animesh Barua
  Cambridge School
- More time should have been given.
  Sakshi Singh
  KV No. 2 Hindan
- I wanted more programs like these.
- It was an awesome experience of visiting the robotics lab. There should have been more about it.
  Deepak Saini

GOING GREEN

- It was wonderful.
  Anisha
- It was very interesting.
  Sandipa
  KV , Andrews Gunj
- It was very nice workshop. All volunteer were helpful.
  Sejal
  Bal Bharati Public School, Pitampura
- Well explained, awesome experiments delivered by Mirandians.
  Simran
  KV No.2 Delhi cantt.
- Experiments were well presented conceptually and practically. Mentors were helpful.
  Sonal Sharma
  KV D L Meerut
- This was the best workshop I had attended here. The presenters were friendly.
- This was the best workshop from those which we have attended .
  Pratik Ray
  KV Pushp Vihar
- Amazing workshop!! very knowledgeable and practically applicable also.
  Ritika Kumar
  Sri Venkateshwar International School
- Ekta mam, our men tor was really nice. The explanation was clearly understood
  Animesh Barua
  Cambridge School
- Got a clear understanding about sunscreen and which sunscreen is best to buy.
  Khwaish Grover
- Please give chance to students to take reading themselves.
  Govind jha
  KV No1 Delhi Cantt.
- No comments because presentation was awesome!!!
  Sambhav Jain
  Cambridge School
- A more spacious environment would have enhanced the process of taking observation.
- Logistic barrier such as lack of space and facilities.
  Devang Sehgal
  DPS Dwarka
- It was all good but I strongly believe it is not of my level still it helps me to enhance a great knowledge and I also got so much new information.
  Vaibhav Kumar Ojha
  KV Andrew Gunj

AMUSEMENT PARK PHYSICS

- Amusement Park was an amazing workshop session. Got to know a lot.
- Very good. Informative and fun.
  Devang Sehgal
  Delhi Public School Dwarka
- The best I had today.
- The experiment was very very good.
- I really enjoyed it.
- It was excellent, lot of fun, amusement rides cool. Pendulum explanation was the best.
  Sanchit jain
  Kendriya Vidyalaya Paschim Vihar
- Very nice and novel presentation.
  Mrityunjaya
  Kendriya Vidyalaya no.2 Delhi Cantt.
- They used novel method of teaching and I really loved it.
  Manish
  Kendriya Vidyalaya no.2 Delhi Cantt.
- Loved the rollercoaster one!
  Yashodhara
  Delhi Public School Mathura Road
- A few more complex could have enhanced it.
- Best workshop till now. The teachers were good and very interesting concepts.
  Praveen Yadav
  Kendriya Vidyalaya Tughlakabad
- Explanation by the teachers was very good.
  Saurav Sharma
  Kendriya Vidyalaya Tughlakabad
- Workshop was amazing especially Bungee Jumping was extraordinary.
  Ritwik Raj Bose
  Kendriya Vidyalaya no.2 Delhi Cantt.

SIMULATION AND VIDEO ANALYSIS : THE MODELLING GAME

- Very interesting. I enjoyed it. Instructors are calm and frank.
  Anand
  Kendriya Vidyalaya no. 3
- It was very good. I enjoyed it very much.
  Paras Chaudhary
  Kendriya Vidyalaya no.3 Delhi Cantt.
- Good teachers. Nice explanation.
  Nikhil
  DL DAV Model School
- Thumbs up. Was useful.
  Manvi
  Kendriya Vidyalaya Sainik Vihar
- The workshop enhanced my knowledge of graphs and study of projectile motion.
  Sahara Senapati
  Kendriya Vidyalaya no.2 Delhi Cantt.
- I learnt a whole new things.
- Avery good experience of mine ever.
  Aastha Tyagi
  Kendriya Vidyalaya Muradnagar
- Nice! But I think it could be more better and interesting.
  Ritika
  Kendriya Vidyalaya Pushp Vihar
- It was awesome. Would like to come again to Miranda. Sad About last workshop. May it would be some days more and more workshops to attend.
  Sanchit Jain
  Kendriya Vidyalaya Paschim Vihar
- A very conceptual workshop. Liked it.
  Ruchika
- Excellent explaining abilities.
  Ahad
  Kendriya Vidyalaya no.3 Delhi Cantt
- Educative workshop. Liked it.
  Rohan
  Kendriya Vidyalaya Vigyan Vihar
- It was great learning experience.
  Arpit Behera
  The Mother's International School
- Excellent, never had a class like this.
  Saswat Kumar
  Kendriya Vidyalaya no.2 Delhi Cantt.

- Fantastic concept, very likeable and realted to everyday concept.
  Anurag Gupta
  Bal Bharati Public School
- Great experience. Enhancement of knowledge. Good faculty.
  Rohan Gupta
  Bal Bharati Public School Rohini
- Very interesting workshop, using maths practically is far better than what we study at school. Very nice.
  Ayush
  Kendriya Vidyalaya Paschim Vihar
- Very interesting!
  Devang Sehgal
  Delhi Public School Dwarka
- Very helpful. I learnt new concepts about different puzzles.
- The best workshop yet attended.
  Rishabh Gupta
  Bal Bharati Public School Rohini

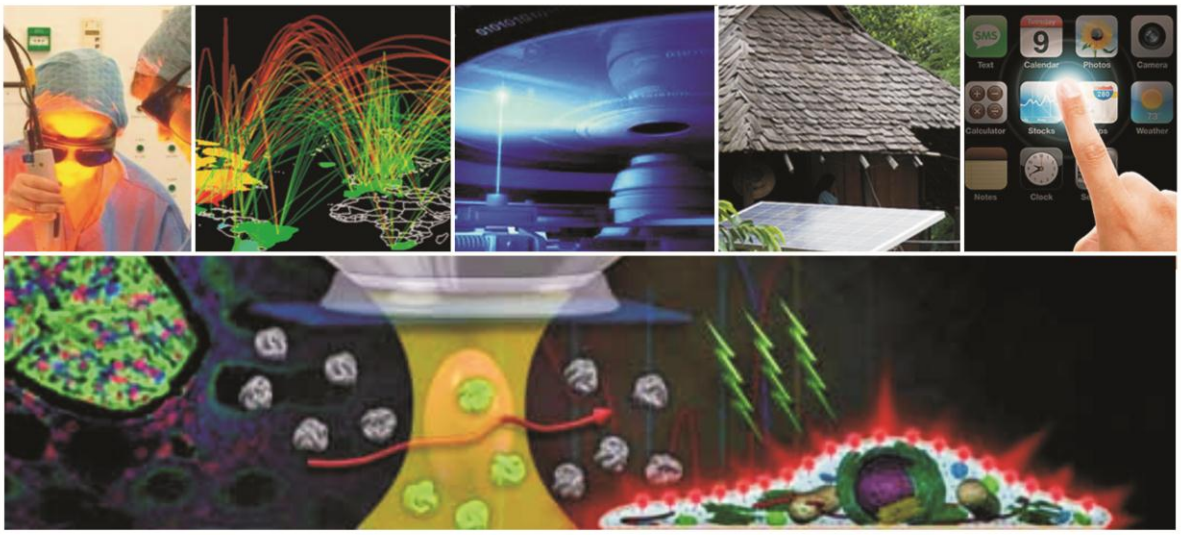
FORENSICS

- There should be a more complicated crime scene for the students.
  Govind Jha
  KV No. 1 Delhi Cantt.
- The demonstration was so good that I am thinking to choose forensics as a career.
  Prabhu Dutt
  KV No. 1 Delhi Cantt.
- Excellent and exciting workshop. Full of curiosity. The best workshop till now.a very interesting issue.
  Ankita Paul
  KV No. 2 Delhi Cantt.
- Mentors gave a good explanation. I was really feeling like I am in CID.
  Shalini Pal
  KV No. 2 Delhi Cantt.
- Mentors Manoj and Ajay did a fabulous job and expanded our observation beyond average.
  Animesh Barua
  Cambridge School
- Very well organised workshop. Thank you sooo much.
  Nisha
- Very enjoyable and informative class. Enjoyed a lot. Mentors were good and friendly.
  Vikas
  KV ,Shalimar Bagh
- It was a fascinating topic to study.we also got to know how forensic department works.
  Himanshu Shukla
- The workshop was extremely interesting, innovative and interactive. This was the best workshop so far.
  Nikita Dhawan
  Vasant Valley School
- This was new and exciting. Easily one of the best!!! Great teachers…….
  Yash Garde
  Vasant Valley School
- Amazing work and super interesting.
  Navreet
  Apeejay School
- The workshop presented an opportunity to study a new field of science.
  Tanvi Suri
- This is one of the greatest workshops that I have attended.
  Ankit Prakash
  KV D L Meerut
- It was great. Mentors were excellent. Awesome.
  Mansi Sharma
  KV No. 2 Hindan

- Presentation was too damn awesome. Really learned something worthwhile. You guys rock…….
  Sonal Sharma
  KV D L Meerut
- I used to see CID daily but today I did something which I saw for almost years.
  Vaibhav
  KV Andrews Ganj
- Teachers here were so much understandable than my school teachers.
  Manish
  KV No. 1 Delhi Cantt.
- My experience was soo good.
- I would like to visit here again. I wish my school organize inspire programme every year.
  Bharti Phogat
  KV Andrews Ganj
- I really enjoyed working like a CID team. It changed my perspective about crime scenes.
  Vasu Malhotra
  Cambridge School
- The experiments were awesome. The teacher was wonderful and taught everything nicely. It was my first experiment and was amazing. Thank you!!!!!!

15 to 20 December 2014

Promotional Material and Certificates



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Innovation in Science Pursuit for Inspired Research

An initiative of DST, Government of India

INTERNATIONAL YEAR OF LIGHT 2015

13 to 17 July 2015

Organised by

Miranda House, University of Delhi

D S Kothari Centre for Research and Innovation in Science Education

Department of Science and Technology
Ministry of Science and Technology
Government of India

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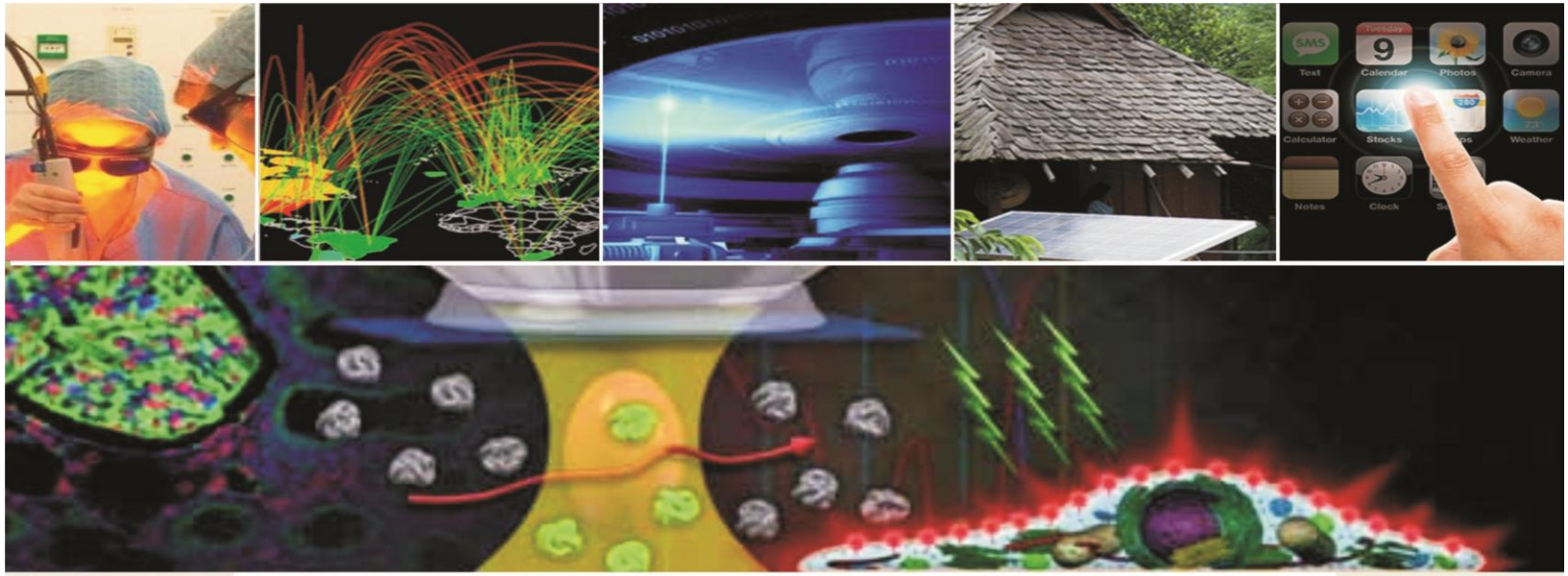

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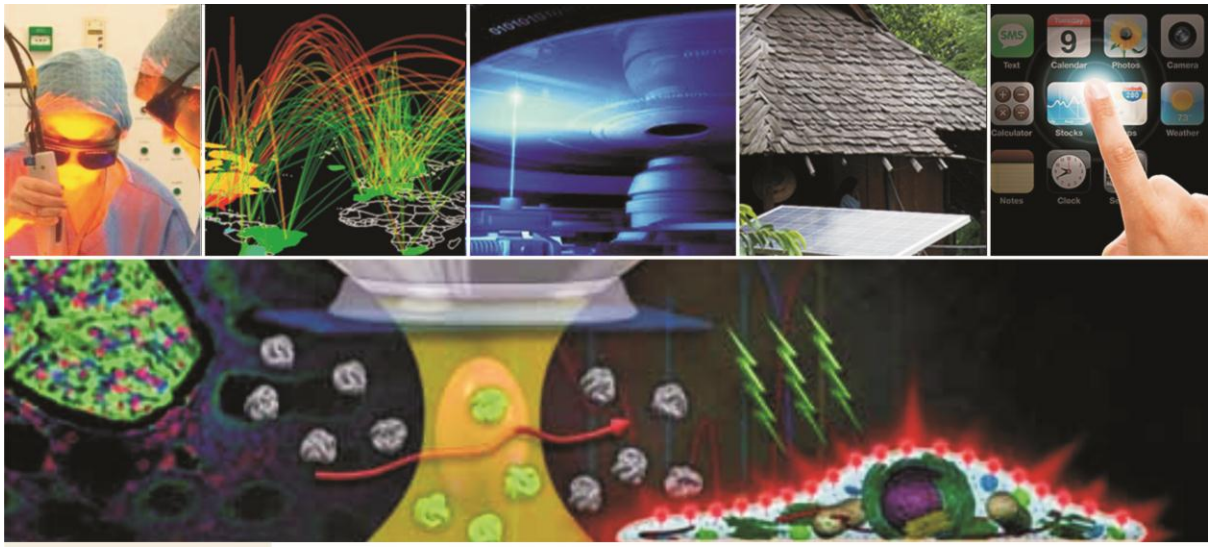

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INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015
Programme for the Day

	Monday, 13 July 2015
08.30 am to 09.30 am	**Registration** Venue: Miranda Arcade and Miranda Foyer
09.30 am to 09.45 am	*Welcome Address: Introduction to INSPIRE Internship Program* Dr. Pratibha Jolly, Principal Miranda House and PI DSKC
09.45 am to 11.15 am	**Motivational Talk** *Emerging world of Digital Light. Light that is not just for Illumination.* Mr. Harshavardhan Chitale CEO, Philips Lighting Solutions South Asia
11.15 am to 11.30 am	Mid Day Snack
11.30 am to 01.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.00 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*

D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015
Programme for the Day

	Tuesday, 14 July 2015
09.30 am to 11.00 am	**Motivational Talk** *Medical Imaging: Applications to Neuroscience* Dr Subash Khushu NMR Research Centre, Institute of Nuclear Medicine & Allied Sciences
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*

D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015
Programme for the Day

	Wednesday, 15 July 2015
09.30 am to 11.00 am	**Motivational Talk** *Revolutions in Optics* Professor Anurag Sharma Indian Institute of Technology, Delhi
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Stage Science Show** *Fascinating Physics* Education Outreach Team, National Science Centre, Delhi
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*

D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015
Programme for the Day

	Thursday, 16 July 2015
09.30 am to 11.00 am	**Motivational Talk** *Excitement in Laser Spectroscopy* Professor Kankan Bhattacharyya Indian Association for Cultivation of Science, Kolkata
11.00 am to 11.15 am	Mid Day Snack
11.15 am to 01.15 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*
01.15 pm to 02.00 pm	Lunch
02.00 pm to 04.00 pm	**Hands-on Workshop Sessions** *Venues: DSKC Labs* *15 Parallel Workshops; student groups of 15*

D S Kothari Centre for Research and Innovation in Science Education
Miranda House, University of Delhi

INSPIRE Internship Programme
Monday, 13 July to Friday, 17 July 2015
Programme for the Day

	Friday, 17 July 2015
09.30 am to 11.00 am	**Motivational Talk** *Dhruva Space - Story of India's first private small satellite enterprise.* Mr. Abhishek Raju Dhruva Space, India
11.00 am to 11.30 am	Mid Day Snack
11.30 am to 01.00 pm	**Motivational Talk** Dr. Tessy Thomas Project Director, Agni IV and Agni V Missile Defence Research and Development Organization (DRDO)
01.00 pm to 02.00 pm	Lunch
02.00 pm to 03.30 pm	**Motivational Talk** *India's Dramatic Journey To Mars -- Telling The Story & Spreading The Magic* Dr. Subhadra Menon and Mr. Pallava Bagla Award Winning Science Writers and Communicators Authors of Reaching for the Stars: India's Journey to MARS and Beyond
03.30 pm to 04.00 pm	**Valedictory Session** *Feedback* *Distribution of Certificates*

D S Kothari Centre for Research and Innovation in Science Education

Miranda House, University of Delhi

INSPIRE INTERNSHIP PROGRAMME 2015

Innovation in Science Pursuit for Inspired Research

An Initiative of

Department of Science and Technology, Government of India

13 July to 17 July 2015

This certificate is awarded to .....

from ..... for participating in the

INSPIRE INTERNSHIP PROGRAMME 2015, held at Miranda House, University of Delhi.

Dr. Pratibha Jolly
PI, DS Kothari Centre & Principal, Miranda Hou

INSPIRE Internship Programme 2015

Program Schedule

13 July to 17 July 2015

Motivational Talk 1
Emerging world of Digital Light. Light that is not just for Illumination.
Mr. Harshavardhan Chitale
CEO, Philips Lighting Solutions South Asia

Motivational Talk 2
Medical Imaging: Applications to Neuroscience
Dr Subash Khushu
NMR Research Centre, Institute of Nuclear Medicine & Allied Sciences

Motivational Talk 3
Revolutions in Optics
Professor Anurag Sharma
Indian Institute of Technology, Delhi

Motivational Talk 4
Excitement in Laser Spectroscopy
Professor Kankan Bhattacharyya
Indian Association for Cultivation of Science, Kolkata

Motivational Talk 5
Dhruva Space – Story of India's first private small satellite enterprise.
Mr. Abhishek Raju
Dhruva Space, India

Motivational Talk 6
Science & Technology Growth
Dr. Tessy Thomas
Project Director, Agni IV and Agni V Missile
Defence Research and Development Organization (DRDO)

Motivational Talk 7
India's Dramatic Journey To Mars – Telling The Story & Spreading The Magic
Dr. Subhadra Menon and Mr. Pallava Bagla
Award Winning Science Writers and Communicators
Authors of Reaching for the Stars: India's Journey to Mars and Beyond

Hands-on Workshops:

1. Chemistry: The Green Pathway
2. Chemistry: Colors of Gold and Silver
3. DNA and Enzymes: Tiny but Mighty Players
4. The Cell: Life's Playground
5. Designing Life: Small Experiments
6. The World of Molecules: Playing with Structures
7. Physics: The World in Motion
8. Physics: Sense, Measure and Control the World
9. Robotics: Impacting Life
10. Going Green: Science for a Sustainable Future
11. Science on the Move: Amusement Park Physics
12. Simulations and Video Analysis: The Modelling Game
13. Remote Sensing: Map Your Environment
14. Forensics: To Catch a Thief
15. Kites in Capital: Urban Ecology of the Commonest Raptor

Stage Science Show
Fascinating Physics
Education Outreach Team, National Science Centre, Delhi

15 to 20 December 2013

Workshop