



ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE  
AND SCHOOL EDUCATION DEPARTMENT, TAMIL NADU



TAMILNADU  
INNOVATORS

இளம்

CHALLENGE

## STAGE 2 - TNIIC 2019 REPORT



## 4-DAY RESIDENTIAL TRAINING WORKSHOP

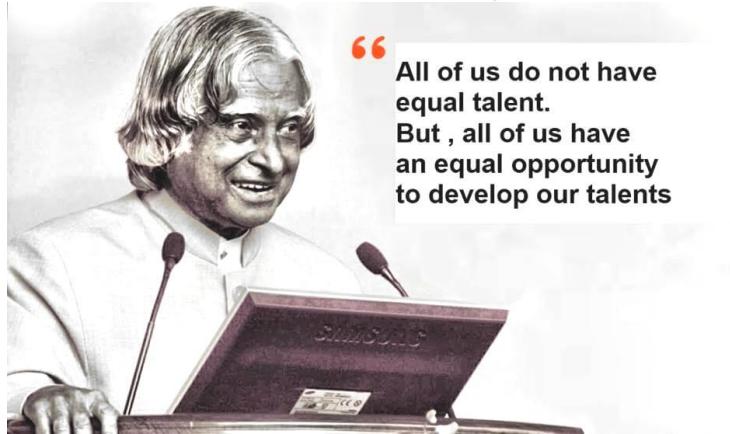
28.11.2019 - 01.12.2019

MADRAS INSTITUTE OF TECHNOLOGY

ANNA UNIVERSITY, CHENNAI

Supported & Organized by IEDP Hub - ED Cell MIT Chennai



**Sincere Thanks to**

1. Principal Secretary, M.S.M.E Department & Director, EDII-TN Dr. Rajendra Kumar, I.A.S
2. Principal Secretary, School Education Dept. Th. Pradeep Yadav, I.A.S
3. Director, School Education Department Dr. S.Kannappan
4. Additional Director, EDII-TN Tmt. R.V.Shajeevana
5. Dean, Madras Institute of Technology Dr. T.Thyagarajan
6. Joint Director(NSS), School Education Dept. Th. M.Vasu
7. Joint Director(P), School Education Dept. Th. Nagaraja Murugan
8. Deputy Director(PMO), EDII-TN Th. R.Shiva Shankar
9. Chief Education Officers of the Districts of Tamil Nadu
10. Assistant Director, EDC, MIT Chennai Dr.Neelavathy Pari
11. Partnering Startups – Infinite Engineers, Warhorse, M.A.D.I.E.E, SP Robotic Works, E21 IIT-Madras and Getset Ventures.
12. Hub Coordinators and Field Coordinators of EDII-TN IEDP Hubs of Chennai, Coimbatore, Madurai, Trichy, Karaikudi, Salem, Tirunelveli and Villupuram.

And to all the District Education Officers, District Eco Coordinators, Learning Links Foundation, Headmasters/Principals, Teachers, Atal Tinkering Lab-Incharges, District Captains and all the supporting staff in organizing the TAMIL NADU ILAM INNOVATORS CHALLENGE 2019.



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## TAMIL NADU ILAM INNOVATORS CHALLENGE 2019

### ABOUT THE PROGRAMME:

- **Tamil Nadu Ilam Innovators Challenge 2019** is jointly organized by Entrepreneurship Development and Innovation Institute (EDII-TN) and School Education Department, Govt. of Tamil Nadu with partnering Startups; Infinite Engineers, Warhorse, MADIEE, PiJam Foundation, SP Robotic Works Maker Labs, E21- IIT Madras and Getset Ventures.
- **TNIIC 2019** is a State Level Innovation Challenge focussed on inculcating the spirit of Innovation and developing Entrepreneurial Skills (21<sup>st</sup> Century Skills) amongst the School Students (8<sup>th</sup> to 12<sup>th</sup>) across the State, as per the vision of the Tamil Nadu Startup and Innovation Policy (2018-23) recently launched by Honourable Chief Minister of Tamil Nadu.
- It is conducted in 2 Phases – 1<sup>st</sup> Phase (April to July) **Train The Trainers (T.T.T) Programme** for College Students to be trained by Startups to be the mentors and trainers for School Students.
- 2<sup>nd</sup> Phase (August to February) – 3 Stages – For School Students of 8<sup>th</sup> to 12<sup>th</sup> Standard
  - o **Stage 1** – District Level Selections through Gamified Modules in all the Districts of Tamil Nadu.
  - o **Stage 2** – Hub/Zonal Level 4 Day Residential Training Programme at Chennai, Coimbatore, Trichy, Madurai and Tirunelveli.  
15 Teams/Schools will be awarded cash awards of Rs.10,000/- each
  - o **Stage 3** – State Level Finals – One Day Programme at Chennai.  
5 Teams/Schools will be awarded a State Level Fellowship of Rs 1,00,000/- each and their corresponding District Captains will be awarded a Credit Voucher for Rs10,000/- each.
- More than 500 Schools have registered for TNIIC 2019, in which 60% of the participation is from Government and Government Aided Schools, we have also reached out to Tribal Residential Schools.



**A MEMORANDUM OF UNDERSTANDING (MoU) was signed between EDII-TN and the School Education Department, Government of Tamil Nadu on 27.06.2019 (International MSME Day).**

- To Plan and Organize the Tamil Nadu Ilam Innovators Challenge in all the Educational districts of Tamil Nadu to inculcate the spirit of innovation and entrepreneurial skills in school students.
- To create awareness about Makerspaces and Atal Tinkering Labs, help in setting up and maintenance.
- To train the teachers in understanding the Startup culture, Innovation and Entrepreneurship and update the teaching methods to support the students.
- To create, set up and maintain Junior Entrepreneurship Cells (E-Cells) in schools/makerspaces and establish a learning/mentoring relationship with College E-Cells
- and all other programmes that benefit the students and teachers.



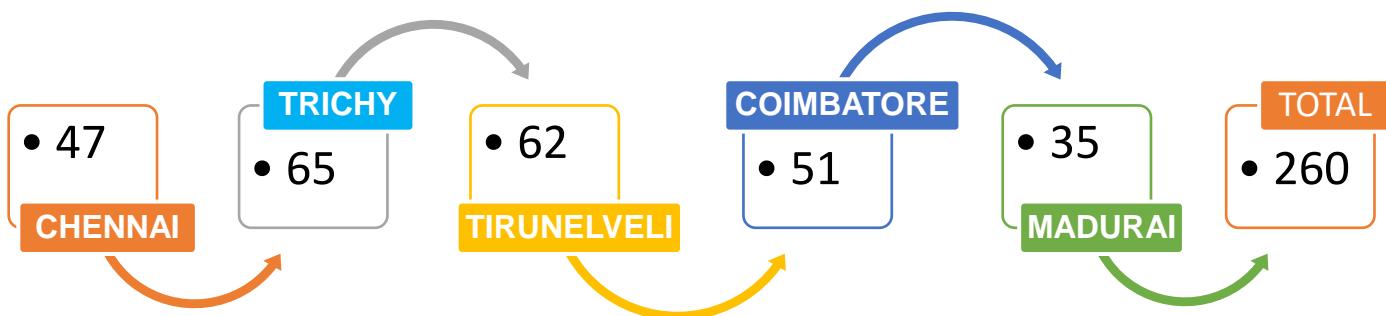
**About EDII-TN - Entrepreneurship Development and Innovation Institute** is a Non-Profit Autonomous Society established by the Government of Tamil Nadu in 2001. Collaborating with corresponding knowledge partners, EDII-TN conducts various training programs, gatherings, mentoring sessions from industry experts and stake holders for Students, Graduates, Startups, MSMEs and Entrepreneurs. EDII-TN has provided training to around 2.33 Lakh entrepreneurs in the state right from its establishment.

EDII-TN is also the nodal agency for implementing the Tamil Nadu Startup and Innovation Policy (2018-23) to achieve the mission and objective of making Tamil Nadu the best Knowledge Capital and Innovation Hub in the Country. The Policy will help create, support and nurture the vibrant startup ecosystem and the culture of innovation and entrepreneurship in Schools and Colleges as well.

Since 2016-17, EDII-TN has been implementing an exclusive policy for Colleges of Engineering, Arts & Science background, Polytechnic Colleges and Industrial Training Institutes (ITIs') called **Innovation and Entrepreneurship Development Programme (IEDP)**, having created and registered more than 300+ Active Entrepreneurship Cells (E-Cells) in Colleges.

**TRAIN THE TRAINERS (T.T.T) Programme**, which initiates the First Phase (May – July, 2019) of the Tamil Nadu Ilam Innovators Challenge 2019, was conceptualized to develop a nurturing relationship between Schools and Colleges. The College Students were trained by the partnering Startups – Infinite Engineers and Warhorse, on how to mentor school students and facilitate Stage 1 of TNIIC 2019 – District Level Selections of School Students in each of the 32 Districts across the State.

**The T.T.T Programme was conducted in 5 Hubs – A Total of 260 College Students were trained, out of which 104 College Students were selected as District Captains for their respective Districts.** Stage 1 of TNIIC 2019 was planned to be conducted as 52 Batches in 32 Districts, which means each batch will be facilitated by 2 District Captains.



- **Chennai** (28.05.2019) Organized by EDII-TN
- **Trichy** (11.06.2019) Organized by EDII IEDP Hub – Anna University- UCE-BIT Campus, Tiruchirapalli.
- **Tirunelveli** (02.07.2019) Organized by EDII IEDP Hub – Anna University, Regional Campus, Tirunelveli.
- **Coimbatore** (12.07.2019) Organized by EDII IEDP Hub – Anna University, Regional Campus, Coimbatore.
- **Madurai** (22.07.2019) Organized by EDII IEDP Hub – Thiagarajar College of Engineering, Madurai

The Selected District Captains were coordinated and supported by Field Coordinators of EDII IEDP Hubs of Chennai, Coimbatore, Salem, Madurai, Trichy, Tirunelveli and Villupuram along with Project Executives of TANSIM/EDII-TN.

The list has been uploaded on Official Website ([www.tniic.in](http://www.tniic.in)) and Facebook Pages ([www.facebook.com/tniic2019](https://www.facebook.com/tniic2019)) of TNIIC 2019.

**STAGE 1 – DISTRICT LEVEL SELECTIONS** has been conducted in Two Phases

**1<sup>st</sup> Phase – August and September 2019**

**2<sup>nd</sup> Phase – October and November 2019**

### August & September 2019

- 30 Batches
- 17 Districts
- 867 Students
- 285 Teachers
- 294 Schools

### October & November 2019

- 22 Batches
- 16 Districts
- 604 Students
- 211 Teachers
- 200 Schools

### STAGE 1 - TNIIC Completed

- 52 Batches
- 32 Districts
- 1471 Students
- 496 Teachers
- 494 Schools

**Stage 1 of Tamil Nadu Ilam Innovators Challenge 2019** has been developed as a Gamified Module for District Level Selection of School Students (8<sup>th</sup> to 12<sup>th</sup> Standard) by Infinite Engineers and Warhorse, supported by M.A.D.I.E.E, E21 – IIT-Madras and Getset Ventures.

**Stage 1** was conducted in all the **32 Districts of Tamil Nadu** with the support of **School Education Department** (Under the guidance of **Th.M.Vasu, Joint Director (NSS)** and **Chief Education Officers(CEOs)** of each District) and EDII IEDP Hubs. A total of **1471 Students** and **496 Teachers** from **494 Schools** were trained in 21<sup>st</sup> Century Skills and out of which **159 Best Performing School Teams (471 Students)** were selected for Stage 2 – Four Day Residential Training Workshop planned to be conducted at Zonal/Hub Level.

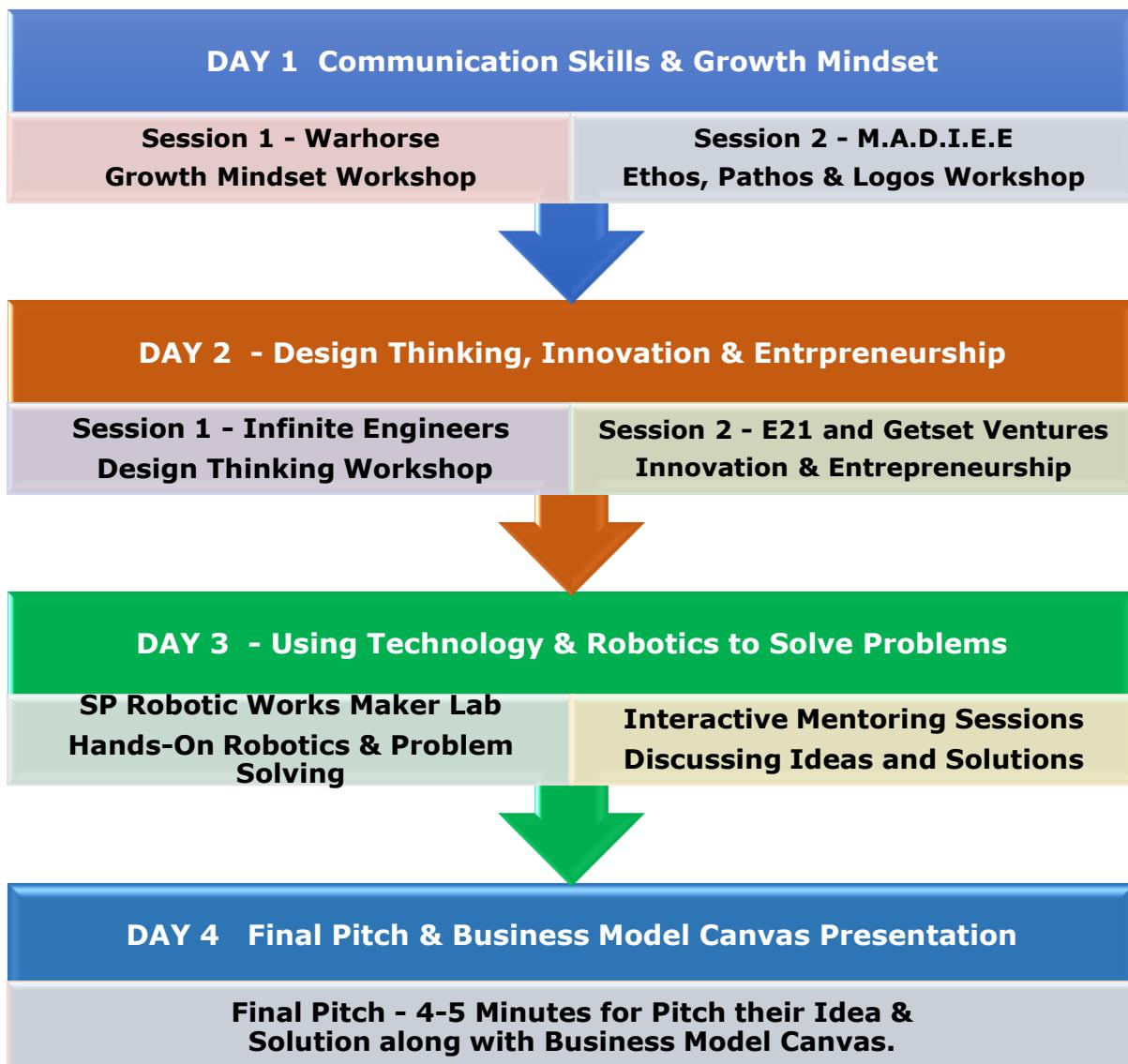
The Gamified Module tested the Students' Ability and Performance in the **4C's, which are the most needed 21<sup>st</sup> Century Skills for the Students**

- **Communication** - Sharing Thoughts, Ideas, Questions and Solutions
- **Collaboration** - Working Together to reach a Goal
- **Creativity** - Trying New Approaches and Innovative Solutions
- **Critical Thinking** - Looking at Problems in a New Way across all subject disciplines and taking precise and timely decisions.

Sl. No.	District	Date Conducted	No.of Batches	No of Schools/ Teams	No.of Students	No. of Teachers	Teams Selected for Stage 2
1	CHENNAI	14.08.2019 & 16.08.2019	2	20	58	21	6
2	PERAMBALUR	19.08.2019	2	20	60	19	6
3	COIMBATORE	20.08.2019	2	17	51	15	6
4	TIRUNELVELI	20.08.2019	2	17	46	17	6
5	TIRUPPUR	21.08.2019	2	24	70	22	6
6	RAMANATHAPURAM	22.08.2019	2	18	53	16	6
7	THANJAVUR	26.08.2019	2	19	55	18	6
8	MADURAI	26.08.2019 & 27.08.2019	2	22	66	22	6
9	CUDDALORE	27.08.2019	2	15	42	14	6
10	THENI	28.08.2019	1	11	33	11	3
11	KANCHIPURAM	28.08.2019	1	11	33	11	3
		11.10.2019	1	11	31	11	3
12	TRICHY	28.08.2019	2	17	51	17	6
13	SALEM	29.08.2019 & 30.08.2019	2	23	68	23	6
14	THOOTHUKUDI	30.08.2019	2	18	54	17	6
15	KANIYAKUMARI	03.09.2019	1	10	31	10	3
16	VIRUDHUNAGAR	04.09.2019	2	20	60	18	6
17	THIRUVALLUR	06.09.2019	1	12	36	14	3
18	NAMAKKAL	17.10.2019	2	14	42	15	6
19	TIRUVANNAMALAI	17.10.2019	1	10	30	10	3
20	DHARMAPURI	18.10.2019	2	17	50	20	6
21	THIRUVARUR	21.10.2019	1	13	38	13	3
22	NAGAPATTINAM	22.10.2019	2	14	41	15	6
23	VILLUPURAM	23.10.2019	1	12	36	14	3
24	SIVAGANGAI	23.10.2019	1	9	28	9	3
25	DINDIGUL	24.10.2019	2	18	53	18	6
26	PUDUKKOTTAI	25.10.2019	2	15	45	15	6
27	ERODE	29.10.2019	2	19	57	20	6
28	KRISHNAGIRI	30.10.2019	1	10	30	10	3
29	ARIYALUR	06.11.2019	1	7	21	6	4
30	VELLORE	07.11.2019	1	9	27	9	3
31	KARUR	13.11.2019	1	14	45	18	5
32	NILGIRIS	14.11.2019	1	8	30	8	3
<b>Total</b>			<b>52</b>	<b>494</b>	<b>1471</b>	<b>496</b>	<b>159</b>

**Stage 1 - District Level Selections**

**Stage 2 – 4 Day Residential Training Workshop** is planned to be organized in 5 Zones / Hubs – Chennai, Coimbatore, Madurai, Trichy and Tirunelveli, supported by EDII-TN I.E.D.P Hubs.



The students selected from Stage 1, will be trained on the concepts of Growth Mindset, Design Thinking, Empathy, Problem Identification & Problem Solving using Technological and Non-Technological Solutions, Business Model Canvas and Pitch Presentation, with the objective to develop and mentor their ideas & innovations and introduce the concept of Entrepreneurship to young minds. The best 3 performing School Teams from each zone/hub will be awarded a cash prize of Rs 10,000/- each to develop their ideas to real time prototype and present their solution at Stage 3 – State Level Finals to be held in Chennai in February 2020.



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**CHENNAI ZONE / HUB**

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**MADRAS INSTITUTE OF TECHNOLOGY (M.I.T) Campus, Anna University**

**28.11.2019 to 01.12.2019**

Madras Institute of Technology (M.I.T) Campus, Anna University, Chennai has been recently recognized as EDII-TN IEDP Hub of Chennai, working along with Centre for Entrepreneurship Development, Anna University, Chennai.

A Letter of Request dated 19.11.2019 was submitted to the Dean of MIT for conducting the Stage 2 – 4-Day Residential Training Workshop for Chennai Zone/Hub at MIT Campus. Dr.Neelavathy Pari, Assistant Director, EDC and Hub Coordinator, followed up the necessary procedures and arrangements were made for the programme. The following table lists the Number of Schools and Students from 8 Districts that come under Chennai Hub.

Sl. No	Zone/Hub	District Name	Total No. of Districts	Total No. of Schools/Teams Selected for Stage 2	Total No. of Students Selected for Stage 2
1	Chennai	Kanchipuram	8	6	18
2		Tiruvallur		3	9
3		Villupuram		3	9
4		Vellore		3	9
5		Tiruvannamalai		3	9
6		Chennai		6	17
7		Krishnagiri		3	9
8		Cuddalore		6	18
<b>Total</b>				<b>33</b>	<b>98</b>

Out of 33 Schools, 2 Schools from Krishnagiri opted to participate in Stage 2 – Coimbatore Zone/Hub and the Schools from Tiruvannamalai were not able to attend because of the Rains.

**Hence, a Total of 26 Teams (78 Students and 24 Teachers) participated in the Stage 2 – First 4-Day Residential Training Workshop at Chennai.**

**Food and Accommodation at MIT Hostel** – We greatly appreciate the efforts of Dr. T.Thyagarajan, Dean, MIT, Dr. Neelavathy Pari, Assistant Director, EDC, MIT Campus, Dr. Vasanthan, Deputy Warden, Marudham Hostel, Th. Arjunan, Hostel & Mess Coordinator, Th. Natarajan, Guesthouse Incharge, Th. Daniel Prabhakaran, Executive, TANSIM/EDII-TN and Th. Selvakumar, Field Coordinator, Anna University, for making the best of their ability possible arrangements for students' and teachers' accommodation.



Out of the 26 Schools that have participated in the First 4 - Day Residential Training Programme, 18 Schools (41 Boys & 13 Girls along with 12 Teachers & Parents) have opted for Accommodation at MIT Hostel and Guesthouse.



The Teachers, EDII Staff and Trainers were accommodated at the MIT Guest House. The TANSIM/EDII-TN has provided basic necessities and mosquito repellent creams for protection.

The MIT Hostel Staff took extraordinary care in preparing the best food for the students and teachers, for which they have received a very good feedback from everybody. One of the Students' wrote, "I felt like eating my mother's cooking".



**Day 1 – Inauguration – 09:45 am – 10:45 am****Venue : Rajam Hall, M.I.T Campus**

The Inauguration of the First 4-Day Residential Training Workshop, which is the Stage 2 of Tamil Nadu Ilam Innovators Challenge 2019 was held at the Rajam Hall of Madras Institute of Technology.

The Inaugural Session was presided by **Dr. Rajendra Kumar, I.A.S**, Principal Secretary to Government, MSME Department and Director of Entrepreneurship Development and Innovation Institute (EDII-TN), as the Guest of Honour.



He was welcomed by

- **Dr. T.Thyagaran**, Dean,  
MIT Campus, Anna University.
- **Tmt. R. V. Shajeevana**,  
Additional Director, EDII-TN.
- **Th. R.Shiva Shankar**,  
Deputy Director PMO, EDII-TN
- **Dr. Neelavathy Pari**,  
Assistant Director  
EDC- MIT Campus.



**Welcome Address by Dr.T.Thyagarajan, Dean, MIT Campus**



Respected Dean of MIT welcomed the Chief Guest and the Dignitaries and extended his warm appreciated and heartfelt gratitude for the students and teachers who have come from the Eight Districts that come under the Chennai Zone/Hub.

**About the Programme by Tmt. R.V.Shajeevana, Additional Director, EDII-TN**





**Th. M.A. Aravind, Co Founder of Infinite Engineers,** represented all the partnering start-ups and described his experience and the efforts taken by the team in successfully conducting the Train The Trainers Programme in 5 Zones/Hub – Chennai, Coimbatore, Madurai, Trichy and Tirunelveli and Stage 1 of TNIIC 2019 in all the 32 Districts of Tamil Nadu.

### **Presidential Address by Dr. Rajendra Kumar, I.A.S, Principal Secretary to Government, MSME and Director of EDII-TN**



The Principal Secretary has delivered a factual and informative speech for the students motivating them to strive for success like Microsoft, Facebook, Flipkart Founders, who have all started their journeys at a very young age. He interacted with many of the students asking questions about their aspirations, he further extended his support that his Team will support any new ideas and innovations through various beneficial schemes of the Government and strive for the growth of the Society. He congratulated and appreciated the efforts of the School Education Department for supporting the programme's objective.

**Vote of Thanks by Dr.Neelavathy Pari, Assistant Director, EDC – MIT**


Dr. Neelavathy Pari sincerely thanked each and every one of MIT Staff, PG Students and particularly the students and teachers, who have come from 26 Schools from Chennai and the Surrounding Districts, conveying her best wishes for the 4-Day Residential Training Workshop.

She also encouraged the students and teachers to take a look around the Campus that was once graced the Late and Beloved President Dr. A.P.J Abdul Kalam.

**The Participating School Teams were split into Two Batches –**

### Batch 1

- SJT Surana Jain Vidyalaya
- Kaligi Ranganathan Montford Matric. Hr. Sec. School
- P C K G Government Hr Sec School, Kodambakkam
- Government High School,Cowlbazar
- Government C M Subbaraya Mudaliyar Higher Secondary School
- Infant Pre.Mat.Hr.Sec.School
- Arumuga Navalar Hr.Sec.School, Chidambaram
- Jawahar Matric. Hr Sec School, Neyveli
- Sri Sarada Vidyalaya Matric. Hr. Sec. School, Ulundurpettai
- Islamiah Boys' HSS, Vaniyambadi
- Sri Venkateswara Matriculation Hr. Sec. School
- Jaya Matriculation Higher Secondary School
- Angavai Sangavai Govt. Hr. Sec. School, Tirukovilur

### Batch 2

- Moongibai Goenka Girls' Higher Secondary School
- Amrita Vidyalayam Senior Secondary School, Nesapakkam
- Jaigopal Garodia Government Girls Hr Sec School
- Govt High School,Nanmangalam
- Panchayat Union Middle School, Kilkathirupur, Kanchipuram
- Panchayat Union Middle School, Thenambakkam
- CK School Of Practical Knowledge, Cuddalore
- St.Dominic Savio Matric Hr. Sec. School
- Sacred Heart Higher Secondary School, Irupukurichi
- Alpha Matriculation Hr.Sec.School, Sembakkam, East Tambaram,
- Government Girls Higher Secondary School, Krishnagiri
- Vivekanda Vidylaya Matric. Hr. Sec. School, Kavanoor, Arakkonam.
- SBOA School & Junior College



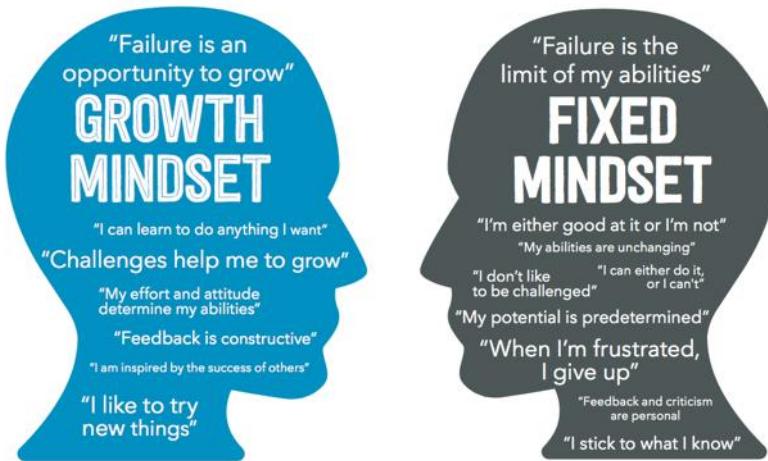
### BATCH 1 – AGENDA

DAY 1 28.11.2019 ELECTRONICS ENGG. BLOCK 2 – GROUND FLOOR HALL	INAUGURATION 09:30 AM – 10:30 AM	SESSION 1 10:30 AM – 01:00 PM WARHORSE GROWTH MINDSET WORKSHOP Focus on Student's Communication Skills, Confidence and Personality Development.	LUNCH	SESSION 1 (contd.) 02:00 PM – 2:30 PM WARHORSE GROWTH MINDSET WORKSHOP Focus on Student's Communication Skills, Confidence and Personality Development.	SESSION 2 02:30 PM- 05:30 PM M.A.D.I.E.E ETHOS, PATHOS & LOGOS Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts
DAY 2 29.11.2019 ELECTRONICS ENGG. BLOCK 2 – GROUND FLOOR HALL		SESSION 1 09:30 AM – 01:00 PM INFINITE ENGINEERS  DESIGN THINKING WORKSHOP Empathy, Problem Identification and Solution – Critical Thinking	01:00 PM - 02.00 PM	SESSION 2 02:00 PM – 5:00 PM E21 & GETSET VENTURES  ENTREPRENEURIAL SKILLS Innovation, Idea 2 Prototype, Product Market Fit & Pitch Presentation	
DAY 3 30.11.2019 COMPUTER SCIENCE TECH. BLOCK – 1 <sup>st</sup> FLOOR		SESSION 1 09:30 AM – 01:00 PM SP ROBOTIC WORKS MAKERLAB  HANDS-ON SESSION - Identifying Problem Solutions using Technology (Incl. IOT, AI and Robotics)	LUNCH	SESSION 2 02:00 PM – 4:30 PM SP ROBOTIC WORKS MAKERLAB  Identifying Problem Solutions using Technology ( Incl. IOT, AI and Robotics)	SESSION 3 04:30 PM - 05:30 PM E21 / EDII-TN DEBRIEFING & PREPARATION FOR FINAL PITCH

### BATCH 2 – AGENDA

DAY 1 28.11.2019 ELECTRONICS ENGG. BLOCK 2 – GROUND FLOOR HALL	INAUGURATION 09:30 AM – 10:30 AM	SESSION 1 10:30 AM – 01:00 PM M.A.D.I.E.E ETHOS, PATHOS & LOGOS Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts	LUNCH	SESSION 1 (contd.) 02:00 PM – 2:30 PM M.A.D.I.E.E ETHOS, PATHOS & LOGOS Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts	SESSION 2 02:30 PM- 05:30 PM WARHORSE GROWTH MINDSET WORKSHOP Focus on Student's Communication Skills, Confidence and Personality Development.
DAY 2 29.11.2019 ELECTRONICS ENGG. BLOCK 2 – GROUND FLOOR HALL		SESSION 1 09:30 AM – 01:00 PM E21 & GETSET VENTURES  ENTREPRENEURIAL SKILLS - Innovation, Idea 2 Prototype, Product Market Fit & Pitch Presentation	01:00 PM - 02.00 PM	SESSION 2 02:00 PM – 5:00 PM INFINITE ENGINEERS  DESIGN THINKING WORKSHOP Empathy, Problem Identification and Solution – Critical Thinking	
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## Day 1 – Session 1 – WarHorse



### Growth Mindset Workshop

Objective of the Workshop is to encourage students to enable growth mindset and to be more confident in pursuing their passion.



Sharat and Akshay from Warhorse facilitated the session and started with an activity to bring out the communication skills of Students.

After the initial introductions, the concept of Growth Mindset was introduced to the Students and the Teachers.

Through various means of communication, Sharath explained how a Growth Mindset is better than a Fixed Mindset.

When students have a growth mindset, they take on challenges and learn from them, therefore increasing their abilities and achievement.

The attitude and belief that you can't learn something is part of a Fixed mindset, and it's something that we can change.



### The Concept of Neuroplasticity:

Neuroplasticity, also known as brain plasticity, is the ability of the brain to change continuously throughout an individual's life, that it can be strengthened by practice.

### CUP Song:

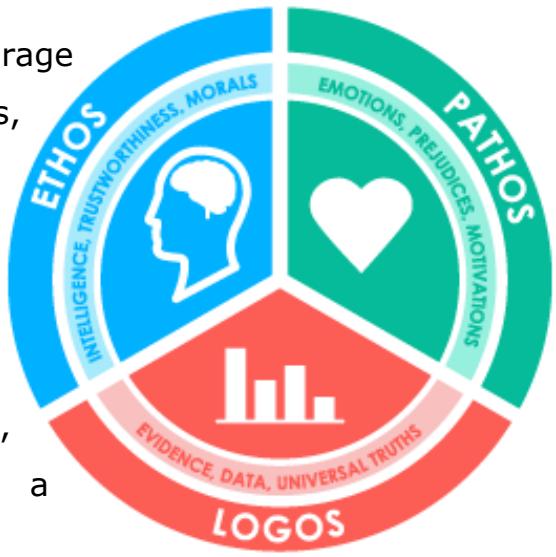
Understanding that with Practice and an Open Mind, you can always perfect the work you are passionate about and perform as a team.



**Day 1 – Session 2 – M.A.D.I.E.E – Ethos Pathos and Logos**

Objective of this Workshop is to encourage students to find the balance between Ethos, Pathos and Logos, which means Intelligence, Emotions and Logic

G.Senthil Kumar, Founder of MADIEE Games brought to the students a very interesting way to test their teamwork, intelligence, emotions and logic through a gamified module.





All the students were split into different teams and each team had a very particular task and objective, through which they have learnt the concept of Ethos, Pathos and Logos.



The Concept of Rhetorical Appeals which is the Ethos, Pathos and Logos and Growth Mindset forms the very basis and fundamentals for Design Thinking, which was planned for Day 2.

The Objective of Day 1 is to broaden the mindsets of the students and help them explore the different possibilities and different ways to connect with each other and with their teachers.

**DAY 2 – SESSION 1 – INFINITE ENGINEERS****DESIGN THINKING WORKSHOP**

- **Empathize**
- **Define**
- **Ideate**
- **Prototype**
- **Test**

**M.A. Aravind, Cofounder, Infinite Engineers**

detailed the following steps on the board and taught the students the process of Design Thinking. The Workshop enabled the students to get Hands-ON with each step of the process.

**Activity :****Building a Maze**

A Labyrinth – It must be solved by the Other Teams.

**Ideating the Labyrinth and Planning the Prototype**



**Test for Each Team to Solve the Labyrinth – The Fastest Team scores the Maximum Points.**

**DAY 2 – SESSION 2 – E21 & GETSET VENTURES****Objective:**

Idea Generation - Concepts of Innovation

Introduction to Entrepreneurship,

Converting Problem Statement & Solution to a Valid Business Model

Art of Pitching



**Interactive Session on Defining Problem Statements and Identifying Solutions**



### Business Model Canvas -



**The Students understood the concept of Business Model Canvas and tried to present their Problem Statements in the form of a Business.**

Real Credit goes to the Team of E21 and Getset Ventures, for their efforts made the students possible to think about Entrepreneurship, that Science Projects will not remain just for Showcase but they too can be converted into viable Business Models and help the people in reality.

**Day 3 – SP Robotics Maker Lab**

SP Robotic Works Maker Lab – D.Vignesh, N.Shyam Sundar, K. Vishal and Team started with how technology can be used to solve different problems in Real Life and took a session on the Basics of Robotics. The students were asked to define their Idea, problem statement and their solution which can either be solved using Technological or Non Technological methods.





**Hands ON Session –  
Understanding Basic Robotics**



**Drone Demonstration:**



**The Session was followed up by One on One Interactive Mentoring for the School Teams by E21, Infinite Engineers, SP Robotic Works Maker Lab and Learning Links Foundation.**



Day 4 - Final Pitch – 01.12.2019

**Presentation of Ideas and Business Model Canvas**

**Session 1 - 09:45 AM to 11:15 AM**

- CK School of Practical Knowledge, Cuddalore
- CM Subbaraya Mudaliyar Govt. Hr. Sec. School, Kanchipuram
- Infant Pre Matric Hr Sec School, Vriddhachalam
- Angavai Sangavai Govt. Hr Sec School, Villupuram
- Sri Sarada Vidyalaya Matric Hr Sec School, Ulundurpet
- St. Dominic Savio Matric Hr Sec School, Cuddalore
- SJT Surana Jain Vidyalaya, Chennai
- Arumuga Navalar Hr Sec School, Chidambaram

**Session 2 - 11:30 AM to 01:15 PM**

- Vivekananda Vidyalaya Matric Hr Sec School, Arakkonam
- Government High School, Cowlbazaar
- SBOA School & Junior College, Chennai
- Sri Venkateswara Matric Hr Sec School, Ambattur
- Government Girls Hr Sec School, Krishnagiri
- Sacred Heart Hr Sec School, Cuddalore
- Jawahar Matric Hr Sec School, Neyveli
- Islamiah Boys Hr Sec School, Vellore

**Session 3 - 02:15 PM to 03:30 PM**

- Kaligi Ranganathan Montford Matric Hr Sec School, Perambur
- Amrita Vidyalayam Sr Sec School, Nesapakkam
- Moongibai Goenka Girls Hr Sec School
- PCKG Government Hr Sec School, Chennai
- Jaigopal Garodia Government Girls Hr Sec School, Chennai
- Government High School, Nanmangalam
- Alpha Matric Hr Sec School, East Tambaram
- Jaya Matric Hr Sec School, Thiruvallur

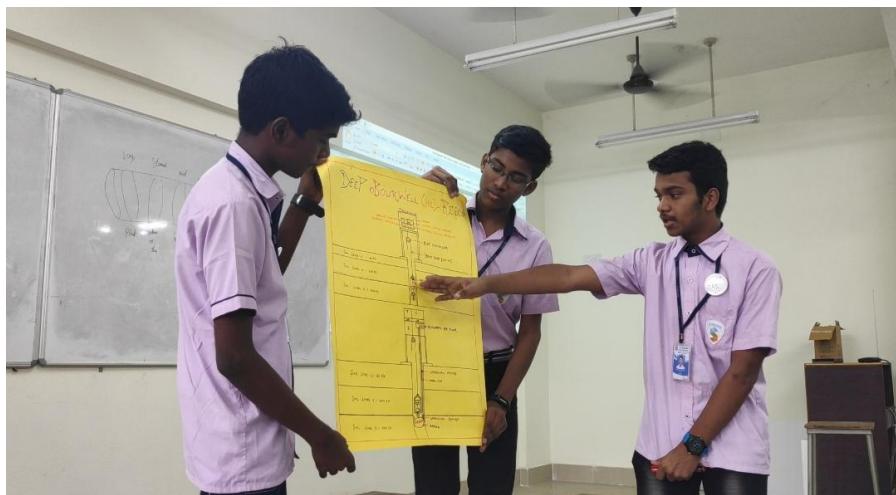
**Judging Criteria:**

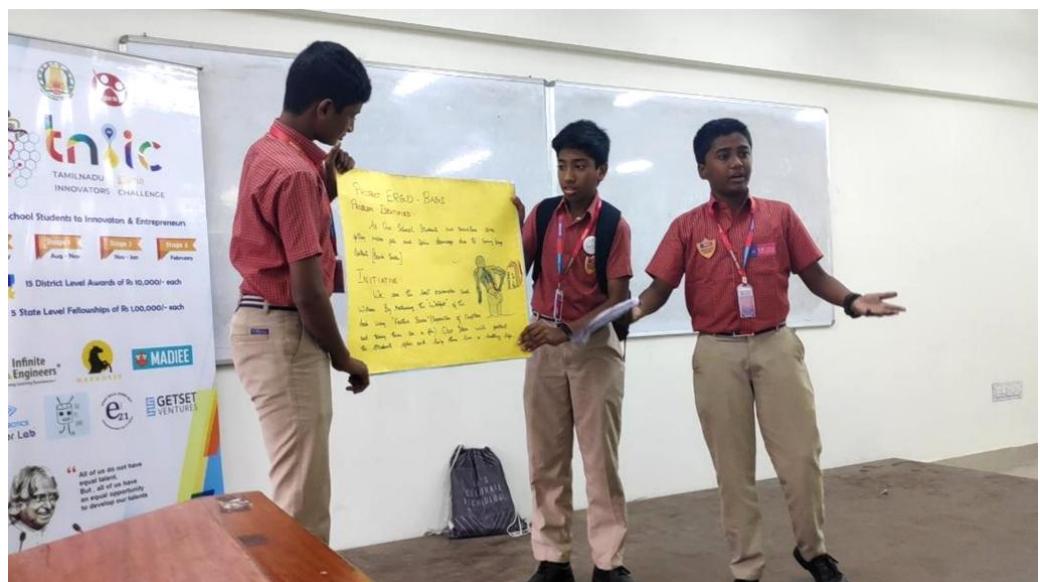
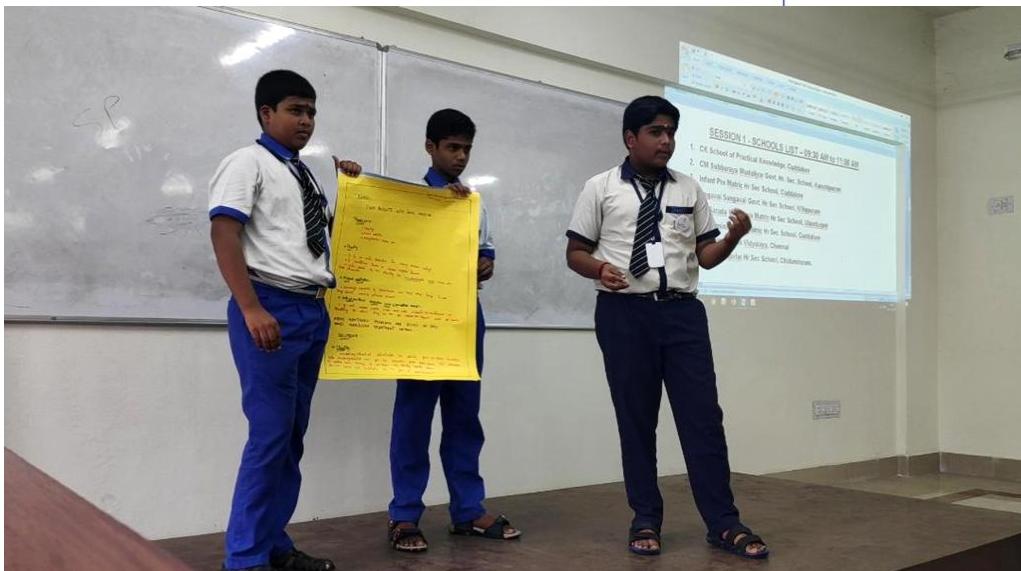
- 1. Problem Statement**
- 2. Solution – Innovation Quotient – Validity**
- 3. Pitch Presentation (within the Time Limit)**
- 4. Social Impact of their Solution and Business Plan**

**Jury:**

- 1. Dr. Neelavathy Pari**, Assistant Director & Hub Coordinator, EDC MIT
- 2. M.Abinash**, Policy Scholar and Manager of Tamil Nadu Startup and Innovation Mission, EDII-TN
- 3. M.A.Aravind**, Co-Founder, Infinite Engineers, specialized in Atal Tinkering Labs and representing all the partnering start-ups.

**Pitch Presentation – Each Team has been provided with 4 Minutes for Pitching and 3 Minutes for Q&A by the Jury.**





**TAMIL NADU ILM INNOVATORS CHALLENGE 2019****STAGE 2 – CHENNAI ZONE WINNERS****➤ Arumuga Navalar Hr Sec School, Chidambaram**

(Unique Solution : Dye-Based Polymer for Satellite Structures tackling the problem of Space Pollution – Idea Tested at Spacekids Competition)

**➤ Government High School ,Cowlbazaar, Kanchipuram Dist.**

(Unique Business Model for Edible Water Bottles combined with Nutritional Flavours and even Tender Coconut for School Kids)

**➤ Kaligi Ranganathan Montford Matric Hr Sec School, Chennai**

(Organic Sanitary Napkins using Sugarcane extracts – Subscription Business Model and Perfect Pitch Presentation)

Certificates were issued to all the participants and winners duly signed by Deputy Director (PMO), EDII-TN and Joint Director(P), School Education Department, Government of Tamil Nadu.

## Feedback

Feedback Forms were circulated with the participating Students and Teachers and were asked to bring to our notice the immediate things that need to be improved upon. Time Management was very much crucial for the success of the programme, there were few problems faced due to operational difficulties and unpredictable weather and storms.

On an Average from all the Feedback Forms received (Out of 5)

1 = Poor   2= Satisfactory   3= Average   4= Good   5= Excellent

Overall Experience - 4

Overall Learning - 5 (Majority)

Stay (Room) - 3

Food & Snacks - 4

Hall & Classroom - 3

Information & Updates - 4

The Students and Teachers appreciated the Training Methods and Approaches taken by our partnering Startup, who have delivered on their part wonderfully well. Everyone understood the objective of each session and a spark was created that win or fail, they will continue to learn new things and seek entrepreneurial skills as well.

## Scope and Benefits

- TNIIC 2019 is a **platform for the students to analyze their own skills, evaluate their competition in the district and in the state, and develop their potential to reach higher levels of competition**. The programme will make the students competition-ready to compete at the National Level like in INSPIRE, National Science Congress, Google Science Fair, etc. This will also bridge the skill-level and confidence gap between Government and Private schools.
- Stage 2 of Tamil Nadu Ilam Innovators Challenge 2019 has achieved the objective of creating the Growth Mindset required to seek new challenges

and learn new things, continuously pursuing their passion and interest. Irrespective of Win or Fail, The Students have started thinking as an Innovator and an Entrepreneur.

- Tamil Nadu Ilam Innovators Challenge 2019's Objective is to inculcate the spirit of Innovation and develop Entrepreneurial Skills i.e 21<sup>st</sup> Century Skills in school students across all the districts of Tamil Nadu. **The team has collected valuable data with different parameters and through analysis of which, we can identify the strengths and shortcomings of each of the Districts and each Board of Education.**
- TNIIC 2019 enabled the team to get **Ground Level Data on 120+ Atal Tinkering Labs currently established and functioning in the State**, analysis of which will be beneficial to ATAL Innovation Mission, Tamil Nadu Startup and Innovation Mission, School Education Department, Entrepreneurship Development and Innovation Institute and Startups in the field of Education and Edu-Tech.

Also, in the near future these Atal Tinkering Labs can perform as the base of operations for **the Junior E-Cells or Innovation Cells, supported by College E-Cells through the AIEDP Programme of EDII-TN/TANSIM.**

- The Programme has created much **awareness amongst the Students, Teachers and Schools** about the Initiatives and Schemes that the Government of Tamil Nadu and Government of India has implemented for their benefit through the School Education Department, RMSA, SSA, EDII-TN and such departments/agencies.
- The School Education Department through EDII-TN/TANSIM has opened up Government schools and Government Aided Schools for our partnering start-ups to work with and do the best they can for the benefit of the Students and Teachers. **The Teachers can also be trained in this regard, to build their capacity and to introduce innovative teaching methodologies in class. The Government and Startups can work together in this regard and in more cases.**



For More Details & Information:



Visit our website: [www.tniic.in](http://www.tniic.in)

Facebook Page: [www.facebook.com/tniic2019](https://www.facebook.com/tniic2019)

E-Mail: [tniic@editn.in](mailto:tniic@editn.in) and [tniic2019@gmail.com](mailto:tniic2019@gmail.com)

**Contact:**

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**Suhas Darsi, Project Executive**

99622 62295

**Our Partners – The TNIIC 2019 Team**

**INFINITE ENGINEERS**

<http://infiniteengineers.in/>

**WARHORSE**

<http://warhorse.in>

**MADIEE**

<https://www.madiee.com/>

**SP ROBOTIC WORKS**

<https://sproboticworks.com/>

**E21 – IIT-M**

<https://www.facebook.com/ECELLIITM/>

**PIJAM FOUNDATION**

<http://www.thepijam.org/>

**GET SET VENTURES**

<https://getset.co.in/>