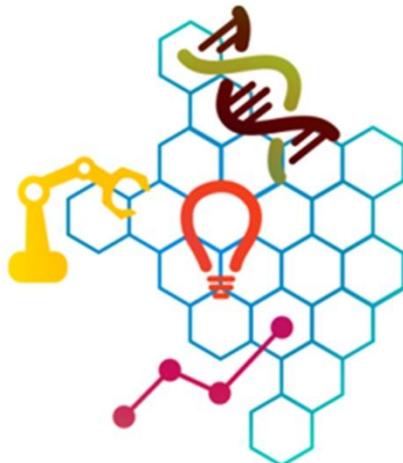
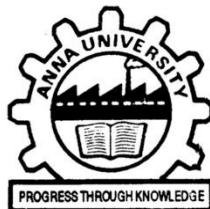




ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE  
AND SCHOOL EDUCATION DEPARTMENT, TAMIL NADU



## STAGE 2 - COIMBATORE ZONE REPORT



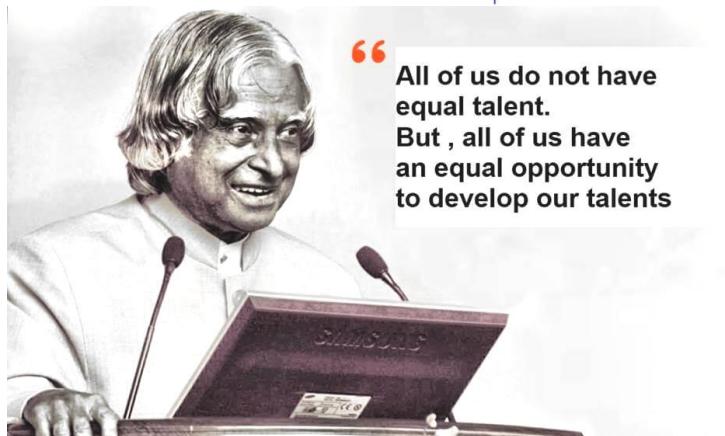
### 4-DAY RESIDENTIAL TRAINING WORKSHOP

03.01.2020 to 06.01.2020

ANNA UNIVERSITY REGIONAL CAMPUS  
COIMBATORE (AU-RCC)

Supported & Organized by IEDP Hub - ED Cell AURCC, Coimbatore



**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. Vice Chancellor, Bharathiar University Prof. Dr. P. Kaliraj
6. Dean, Anna University RCC Dr. K.Ravichandran
7. Joint Director(NSS), School Education Dept. Th. M.Vasu
8. Deputy Director(PMO), EDII-TN Th. R.Shiva Shankar
9. IEDP Coimbatore Hub Coordinator – AURCC Dr. K. Kanthavel
10. Chief Education Officers of the Districts of Tamil Nadu
11. Partnering Startups – Infinite Engineers, Warhorse, M.A.D.I.E.E, SP Robotics Maker Lab, 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.



TAMILNADU  
INNOVATORS

இளம்  
CHALLENGE

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TAMILNADU  
INNOVATORS

இளம்  
CHALLENGE

**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.



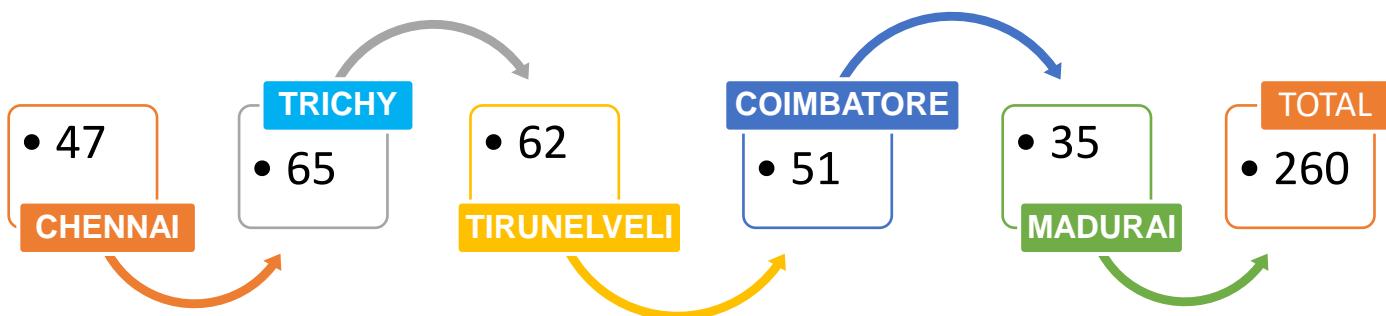
**About EDII-TN - Entrepreneurship Development and Innovation Institute** is a Non-Profit Autonomous Society established by the Government of Tamil Nadu in 2001. Collaborating with corresponding knowledge partners, EDII-TN conducts various training programs, gatherings, mentoring sessions from industry 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

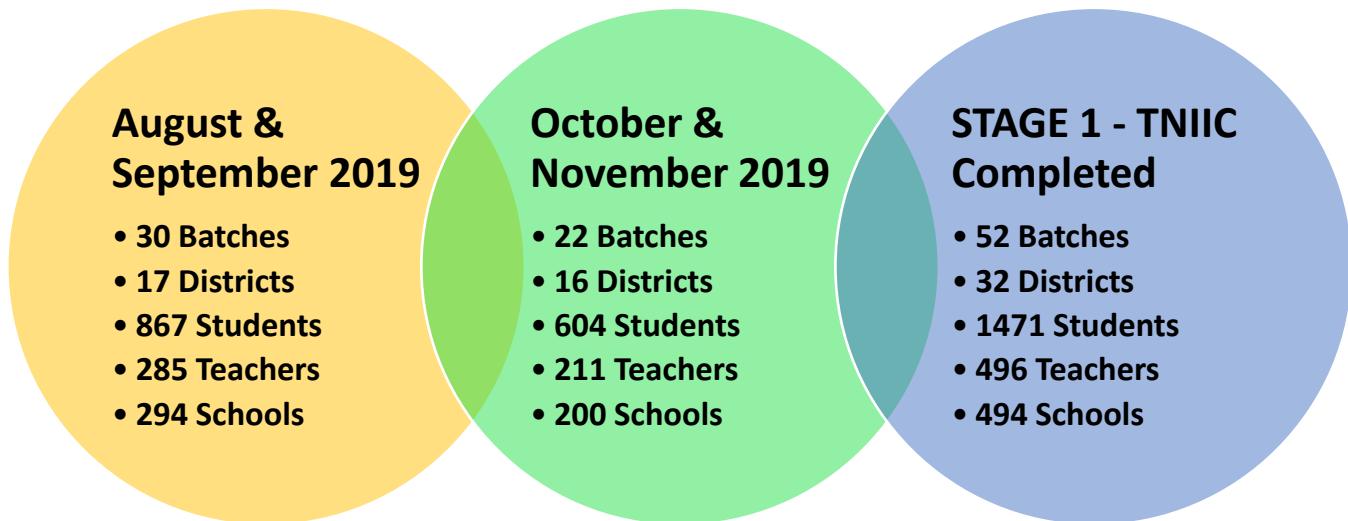
The Selected District Captains were coordinated and supported by Field Coordinators of EDII IEDP Hubs of Chennai, Coimbatore, Salem, Madurai, Trichy, Tirunelveli and Villupuram along with Project Executives of TANSIM/EDII-TN.

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**



**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 March 2020.

**COIMBATORE ZONE / HUB**
**Anna University Regional Campus Coimbatore (AU-RCC)**
**03.01.2020 to 06.01.2020**


Anna University Regional Campus Coimbatore has been one of the best performing IEDP Hubs of EDII-TN coordinating more than 90 E-Cells in as many Colleges in Coimbatore, Tiruppur and Nilgiris Districts. IEDP Hub of Coimbatore has been consistently performing at

its best under the leadership of Dr.K.Kanthavel, Hub Coordinator and HOD of Mechanical Engineering Department, AURCC, who has been awarded as the Best Hub-Coordinator by EDII-TN for the year 2018-19.

A Letter of Request dated 16.12.2019 was submitted to the Dean of Anna University Regional Campus Coimbatore for conducting the Stage 2 – 4-Day Residential Training Workshop for Coimbatore Zone/Hub at Anna University Regional Campus Coimbatore. The following table lists the Number of Schools and Students from 7 Districts that come under Coimbatore Zone.

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	COIMBATORE	Coimbatore	7	6	17
2		Dharmapuri		6	18
3		Erode		6	18
4		Salem		6	18
5		The Nilgiris		3	8
6		Tiruppur		6	18
7		Krishnagiri		1	3
<b>Total</b>				<b>34</b>	<b>100</b>

Out of the 34 Teams, 26 Teams (76 Students and 26 Teachers/Parents) have participated in the 4-Day Residential Training Workshop.

**Accommodation at Bharathiar University International Hostel and Hotel Swarga –**

We greatly appreciate the efforts of Dr. K.Kanthavel, Hub Coordinator of IEDP Coimbatore Hub and his ED-Cell team of Th. N.Sekar, Tmt. K.Saranya, Th. S. Sam Jaikumar, Th. Ranjith, Hostel Incharge of Bharathiar University and AURCC student volunteers Th. Saravanan and team, with the support of Prof. Dr. P. Kaliraj, Vice-Chancellor, Bharathiar University & Dr. K.Ravichandran, Dean of AURCC, for making the best possible arrangements for students' and teachers' accommodation.

Out of the 26 Schools that have participated in the 4 - Day Residential Training Programme, 22 Schools (31 Boys & 13 Girls along with 15 Teachers & Parents) and 4 + 4 District Captains have opted for accommodation. Out of which 15 Schools were accommodated in Bharathiar University International Hostel and 7 Schools were accommodated in Hotel Swarga.



Accommodation for EDII Staff and Trainers were arranged at ParkINN Hotel nearby Coimbatore Railway Station Junction. Transportation was arranged for the commute between Bharathiar University International Hostel, Hotel Swarga and Anna University Regional Campus Coimbatore with utmost care taken by the Student Volunteers Th. Hari and team, who regularly took attendance for each day and never missed the timing. Health care facilities were made readily available 24x7 by the ED Cell team and the coordinating volunteers. Also, Post Programme engagement of students, extra-curricular activities and mentorship interactions with college students and faculty has been arranged for the school students to get better insights about engineering, science and arts background to make better decisions about education and career.

**Day 1 – Inauguration – 09:45 am – 10:45 am**

The Inauguration of the Coimbatore Zone Stage 2 of Tamil Nadu Ilam Innovators Challenge 2019, which is a 4-Day Residential Training Workshop, organized by EDII-TN and ED Cell of Anna University Regional Campus Coimbatore, with the support of School Education Department and Bharathiar University, was held at Mechanical Engineering Drawing Hall of AURCC Campus

**Welcome Address:****Dr. K.Kanthavel, Hub Coordinator, IEDP Coimbatore Hub, AURCC**

The Inaugural Session was presided by **Dr. K.Ravichandran, Dean of Anna University Regional Campus Coimbatore** and **Tmt. S.Subhulakshmi District Education Officer, Perur, Coimbatore** (On Behalf of the Chief Education Officer, Coimbatore Th. P.Ayyannan), formally welcomed by **Dr. K.Kanthavel, Hub Coordinator, IEDP Coimbatore Hub, AURCC.**



Dr.K.Kanthavel, welcomed the 26 Schools (76 Students and 26 Teachers & Parents) for the Stage 2 of Tamil Nadu Ilam Innovators Challenge. With the blessings of the almighty, lamp lighting ceremony was held and respected Dean was called upon the dais for the Presidential Address.

**Presidential Address by Dr. K.Ravichandran, Dean of Anna University Regional Campus Coimbatore –**



Respected Dean congratulated the students for qualifying to the Second Stage of TNIIC and explained the importance of learning about entrepreneurship, business and other life skills from a very young age. Sowing the seeds of Innovation and Entrepreneurship is the objective of the programme. He appreciated the efforts taken by the Government - EDII-TN and School Education Department for taking such an initiative and for their continuous support and hard work for promoting the culture of innovation in the students.

He ended the address by motivating the students to learn as much they can using this opportunity and achieve the impossible like how the beloved late former President of India Dr. APJ Abdul Kalam envisioned the youngsters to achieve.

**Inaugural Address by Tmt. S.Subhulakshmi, DEO, Perur, Coimbatore**



Tmt. S.Subhulakshmi, DEO of Perur, Coimbatore, welcomed the students and teachers from 7 Districts who are participating in the programme and conveyed her respects to the CEO of Coimbatore district, Dean of AURCC and the Hub Coordinator. Reminiscing her experience as the Head Master, she explained to the students that the vision that Dr.APJ Abdul Kalam sir had and that the school education department is working hard for that vision. She had appreciated the objective of the programme and added that the Science Projects that students submit for the Exhibitions need not end there, but they could be transformed into viable business projects and that the students themselves can become entrepreneurs, business man and business woman.

**Th. Suhas Darsi, Executive, TANSIM, EDII-TN** delivered the programme address explaining that the students will be learning about the concept of Growth Mindset, Ethos, Pathos & Logos, Design Thinking, Entrepreneurship, Business Plan Canvas and Hands ON Robotics Session in Tamil and English during the workshop. At the end, the fourth day will be the final Pitch Presentation wherein the students will present their innovative ideas to the judges and win 3 District Level Awards of Rs 10,000/- each.

#### The Participating 26 School Teams were split into Two Batches –

#### Batch 1

- Govt. High School,Aihu, Pollachi
- Govt.Hr.Sec.School, Asokapuram
- Venkatalakshmi Matric Hr Sec School, Coimbatore Dist.
- Govt.Model.Hr.Sec.School, Tiruppur
- Mariyammal Girls Hr.Sec.School, Pollachi
- Government Higher Secondary School Ganapathypalayam
- Appu Arivaalayem, Salem
- Govt. Boys Hr. Sec. School, Thammampatti
- Government Model Hr Sec School, Sekkodi, Palacode
- Government High School, Kovilur, Palacode Union
- Government Hr Sec School, Bommahalli, Karimangalam
- Government Hr Sec School, Mylambadi
- Government High School, Thoraihatti
- St. Josephs Hr Sec School, Ooty

#### Batch 2

- Government High School,Kanuvaii
- Stanes Angilo Indian Hr.Sec.School, Coimbatore
- Bharathi Vidhyalaya Matric Higher Secondary School
- Model Hr Sec School, Moolanur
- Adharsh Vidhyalaya Matric Hr Sec School
- Sri Sarada Vidyalaya Higher Secondary School For Girls
- St.Michael's Matric Hr Sec School- Valapady,Salem
- Government Hr Sec School, Elagiri, Nallampalli Block
- Model School Karimangalam, Keragodahalli
- Government Hr Sec School, Seenapuram
- Government Model Hr Sec School, Thuneti
- PUMS Nallagana Kothapalli, Shoolagiri

### BATCH 1 – AGENDA

<b>DAY 1</b> <b>03.01.2020</b> Drawing Hall Second Floor	<b>INAUGURATION</b> <b>09:30 AM – 10:30 AM</b>	<b>SESSION 1</b> <b>10:30 AM – 01:00 PM</b> <b>WARHORSE</b> <b>GROWTH MINDSET</b> <b>WORKSHOP</b> Focus on Student's Communication Skills, Confidence and Personality Development.	<b>LUNCH</b>  <b>01:00 PM - 02:00 PM</b>	<b>SESSION 1 (contd.)</b> <b>02:00 PM – 2:30 PM</b> <b>WARHORSE</b> <b>GROWTH MINDSET</b> <b>WORKSHOP</b> Focus on Student's Communication Skills, Confidence and Personality Development.	<b>SESSION 2</b> <b>02:30 PM- 05:30 PM</b> <b>M.A.D.I.E.E</b> <b>ETHOS, PATHOS &amp; LOGOS</b> Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts
<b>DAY 2</b> <b>04.01.2020</b> Drawing Hall First Floor		<b>SESSION 1</b> <b>09:30 AM – 01:00 PM</b> <b>INFINITE ENGINEERS</b>  <b>DESIGN THINKING WORKSHOP</b> Empathy, Problem Identification and Solution – Critical Thinking		<b>SESSION 2</b> <b>02:00 PM – 5:00 PM</b> <b>E21 &amp; GETSET VENTURES</b>  <b>ENTREPRENEURIAL SKILLS</b> Innovation, Idea 2 Prototype, Product Market Fit & Pitch Presentation	
<b>DAY 3</b> <b>05.01.2020</b> Drawing Hall First Floor		<b>SESSION 1</b> <b>09:30 AM – 01:00 PM</b> <b>SP ROBOTIC WORKS MAKERLAB</b>  <b>HANDS-ON SESSION - Identifying Problem Solutions using Technology (Incl. IOT, AI and Robotics)</b>	<b>LUNCH</b>  <b>01:00 PM - 02:00 PM</b>	<b>SESSION 2</b> <b>02:00 PM – 4:30 PM</b> <b>SP ROBOTIC WORKS</b> <b>MAKERLAB</b>  Identifying Problem Solutions using Technology ( Incl. IOT, AI and Robotics)	<b>SESSION 3</b> <b>04:30 PM - 05:30 PM</b> <b>SP ROBOTICS MAKER LAB &amp; EDII-TN</b>  <b>DEBRIEFING &amp; PREPARATION FOR FINAL PITCH</b>

### BATCH 2 – AGENDA

<b>DAY 1</b> <b>03.01.2020</b> Drawing Hall First Floor	<b>INAUGURATION</b> <b>09:30 AM – 10:30 AM</b>	<b>SESSION 1</b> <b>10:30 AM – 01:00 PM</b> <b>M.A.D.I.E.E</b> <b>ETHOS, PATHOS &amp; LOGOS</b> Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts	<b>LUNCH</b>  <b>01:00 PM - 02:00 PM</b>	<b>SESSION 1 (contd.)</b> <b>02:00 PM – 2:30 PM</b> <b>M.A.D.I.E.E</b> <b>ETHOS, PATHOS &amp; LOGOS</b> Focus on Student's Empathy, Mindset, Social Consciousness incl. Liberal Arts	<b>SESSION 2</b> <b>02:30 PM- 05:30 PM</b> <b>WARHORSE</b> <b>GROWTH MINDSET</b> <b>WORKSHOP</b> Focus on Student's Communication Skills, Confidence and Personality Development.
<b>DAY 2</b> <b>04.01.2020</b> Drawing Hall Second Floor		<b>SESSION 1</b> <b>09:30 AM – 01:00 PM</b> <b>E21 &amp; GETSET VENTURES</b>  <b>ENTREPRENEURIAL SKILLS - Innovation, Idea 2 Prototype, Product Market Fit &amp; Pitch Presentation</b>		<b>SESSION 2</b> <b>02:00 PM – 5:00 PM</b> <b>INFINITE ENGINEERS</b>  <b>DESIGN THINKING WORKSHOP</b> Empathy, Problem Identification and Solution – Critical Thinking	
<b>DAY 3</b> <b>05.01.2020</b> Drawing Hall First Floor		<b>SESSION 1</b> <b>09:30 AM – 01:00 PM</b> <b>SP ROBOTIC WORKS MAKERLAB</b>  <b>HANDS-ON SESSION - Identifying Problem Solutions using Technology (Incl. IOT, AI and Robotics)</b>	<b>LUNCH</b>  <b>01:00 PM - 02:00 PM</b>	<b>SESSION 2</b> <b>02:00 PM – 4:30 PM</b> <b>SP ROBOTIC WORKS</b> <b>MAKERLAB</b>  Identifying Problem Solutions using Technology ( Incl. IOT, AI and Robotics)	<b>SESSION 3</b> <b>04:30 PM - 05:30 PM</b> <b>SP ROBOTICS MAKER LAB &amp; EDII-TN</b>  <b>DEBRIEFING &amp; PREPARATION FOR FINAL PITCH</b>

## Day 1 – Session 1 – WARHORSE

### GROWTH MINDSET WORKSHOP

Objective of the Workshop is to encourage students to learn and practice growth mindset, as a result, to be more confident in pursuing their passion/ any talent. This will help students speak more openly and with confidence and be more aware of their own self and their surroundings.



S.Sharat and Akshay Bharadwaj from Warhorse facilitated the session and started with an activity to bring out the communication skills of Students by asking them to introduce their selves and think/speak about their Strengths and Weaknesses. 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.

#### Growth Mindset vs Fixed Mindset

##### The Difference in a Nutshell

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 ever and this is something that you can never do is part of a Fixed Mindset, and it's something that we can change.

**The Concept of Neuroplasticity - Learning by Doing the Cup Song:**

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 and by changing our mindset.



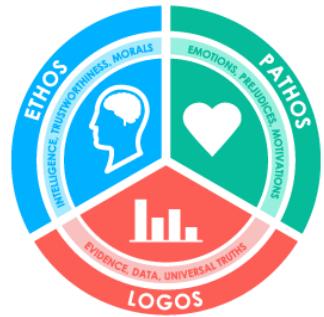
The Objective of the Cup Song is to help the students understand that with Practice and an Open Mind, you can always perfect the work you are passionate about by Chunking. Chunking means the process of breaking down a larger piece into smaller and smaller pieces. Practicing step by step, you can solve any problem in life.



## Day 1 – Session 2 – M.A.D.I.E.E

### ETHOS PATHOS AND LOGO

Objective of this Workshop is to encourage students to find the balance between Ethos, Pathos and Logos, which means Intelligence, Emotions and Logic. The Workshop helps the students to feel, understand, empathize and identify problems and solutions.



G.Senthil Kumar, Founder of MADIEE Games, with his team Kaushik Raja, brought to the students a very interesting way to test their Teamwork, Leadership, Intelligence through Word Association Tests, Emotions and Logic through Gamified Modules – Red Card and Blue Card Game & Diffusing Bombs using Code generated by Word Association.

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.



**ETHOS – Appealing to the Credibility** – The Students were taught to how to introduce themselves, create their own credibility and build character. Their idea is their strength and their actions build credibility.

**PATHOS – Appealing to Emotion** – The Students were taught how to understand and empathize with the audience and speak boldly with passion. Being aware of what's happening in the world and being proactive is the first step towards growth mindset.

**LOGOS – Appealing to Logic** – The Students were taught how to use Logic and their intelligence to help others and to create solutions to the problems identified by them in their day-to-day life.

The Concept of Ethos, Pathos and Logos and Growth Mindset forms the very basis and fundamentals for Design Thinking and Entrepreneurship, which is 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 which will be solved by Other Teams.

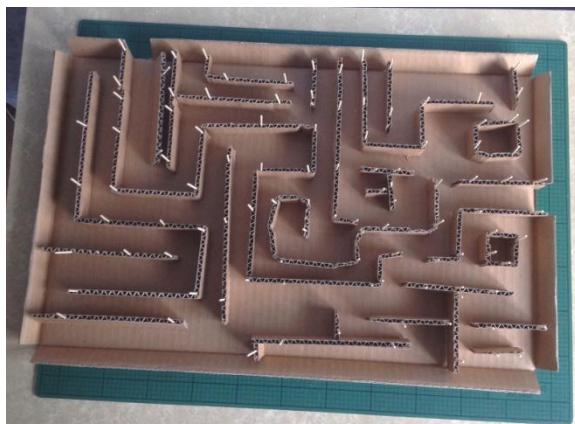
Each Team is provided with Materials Kit to Build a Maze that is difficult for the other team to solve – Point Based Activity.

### Ideating the Labyrinth and Planning the Prototype





### **Test for Each Team to Solve the Labyrinth Puzzle –**



Each Team will try to solve the labyrinth puzzle created by the other team and the time in which each puzzle is solved is noted by the Trainer Th. M.A. Aravind with the help of the District Captains.

By Solving the Puzzle, the students have learnt that the prototype that they have created from ideating and planning is to

be tested by others. Upon testing, the students will see the results whether their plan is working or not. They will receive feedback from each team and then start the process of making better ideas and better execution as well.

### **The Following is the Journey of the Student in TNIIC:**

**Ethos, Pathos & Logos → Growth Mindset → Identifying Problems → Studying the cause and effects → Generating Ideas → Arriving at a Solution through Design Thinking → Prototyping → Testing → Feedback → Repeat followed by Business Planning → Pitch Presentation**

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

Idea Generation – Brainstorming - Concepts of Innovation

Introduction to Entrepreneurship

Converting Problem Statement & Solution to a Valid Business Model

Business Model Canvas & Art of Pitching

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

Shubham from E21  
and Dhanush Ram S  
from Get Set Ventures

**Brainstorming of Ideas**

Students are encouraged to think as if there is NO BOX at all.

An Idea is neither good nor bad; it just needs the right actions to make it a reality.

The ideas are generated for a problem statement that is defined by the Students. The further explore the concept of Ethos, Pathos and Logos during this process.



### Business Model Canvas -



The Students understood the concept of Business Model Canvas by working out examples of Business Models of Prominent Startups such as Swiggy and Ola. Dhanush and Shubham further explained how to pitch their innovative ideas by making presentations through videos and by mentoring the ideas of each group.



Credit goes to the Team of E21 and Getset Ventures, for their efforts made the students ready for the Final Pitch on 06.01.2020 and has helped them to think about Innovation and Entrepreneurship with a newly found interest. They have now realized that their science projects

could indeed become a viable business to help people and society in the future by taking the necessary steps.

**Day 3 – SP Robotics Maker Lab – Hands-On Robotics**

SP Robotics Maker Lab Team – D. Vignesh, N. Shyam Sundar, K. Vishal and Hari Narayanan started with how technology can be used to solve different problems in Real Life and took a session on the Fundamentals for Robotics in Tamil and English. Credit goes to SP Robotics Maker Lab team for they have taken the concept of Robotics to each Government and Government aided school student in a language that is easy for them to understand and has thus created the spark necessary for future innovators.



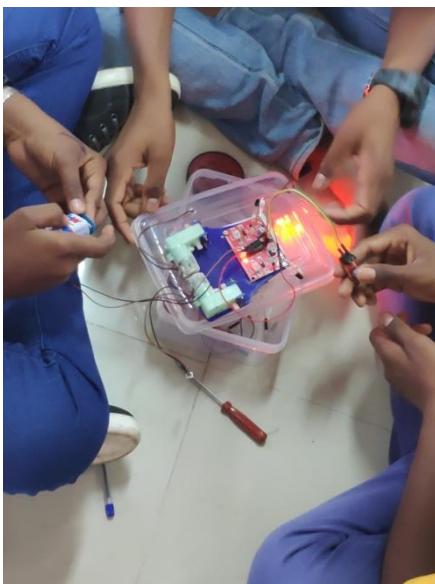
Following the Hands-On Robotics Session, the students were asked to define their Idea, problem statement and their solution which can either be solved using Technological or Non Technological methods. (Mentoring Sessions)

**Hands- ON Session**

**Understanding  
Basic Robotics &  
Mechanics**

**Learning by Doing**



**Drone Demonstration:**

Day 4 - Final Pitch – 06.01.2020

## Presentation of Ideas and Business Model Canvas

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

- Venkatalakshmi Matric Hr Sec School, Coimbatore
- Bharathi Vidhyalaya Matric Hr. Sec. School, Tiruppur
- Sri Sarada Vidyalaya Higher Secondary School For Girls, (Salem District)
- Government Model Hr Sec School, Kundadam (Tiruppur Dist.)
- St. Josephs Hr Sec School, Ooty (Nilgiris District)
- Government Hr Sec School, Mylambadi (Erode District)
- Stanes Angilo Indian Hr.Sec.School, Coimbatore
- Government Model Hr Sec School, Sekkodi, Palacode (Dharmapuri Dt.)
- Government Hr Sec School, Elagiri, Nallampalli Block (Dharmapuri Dt.)
- PUMS Nallagana Kothapalli, Shoolagiri (Krishnagiri District)

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

- Mariyammal Girls Hr.Sec.School, Pollachi (Tiruppur District)
- Govt. Model Hr.Sec.School, Asokapuram (Coimbatore District)
- Appu Arivaalayem (Salem District)
- Government High School, Kovilur, Palacode Union (Dharmapuri District)
- Adharsh Vidhyalaya Matric Hr Sec School, (Tiruppur District)
- Government High School, Thoraihatti (Nilgiris District)
- Government Hr Sec School, Seenapuram (Erode District)
- Government High School, Kanuvai (Coimbatore District)
- St.Michael's Matric Hr Sec School-Valapady (Salem District)
- Govt.High School,Athu, Pollachi

## Session 3 - 02:15 PM to 03:00 PM

- Government Higher Secondary School Ganapathypalayam(Tiruppur Dt.)
- Government Boys Hr Sec School, Thammampatti (Salem District)
- Government Hr Sec School, Bommahalli, Karimangalam(Dharmapuri Dt.)
- Government High School, Thuneri (Nilgiris District)
- Model Hr Sec School, Moolanur (Tiruppur District)
- Model School Karimangalam, Keragodahalli (Dharmapuri District)

**Judging Criteria:****1. Problem Statement**

- Validity, Sector and Scale of the Problem Statement

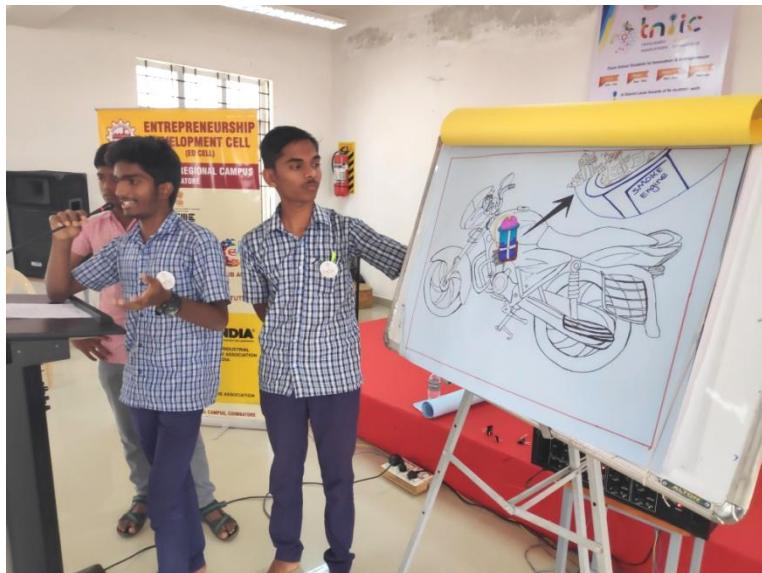
**2. Solution – Innovation Quotient****3. Pitch Presentation (within the Time Limit)**

- Communication & Presentation Approach

**4. Social Impact of their Solution and Business Plan****Jury:****(From Left)**

- 1. Prof Dr. K. Ravichandran, Dean, AURCC**
- 2. Th. R. Shiva Shankar, Deputy Director(PMO), EDII-TN**
- 3. Th. S. Meenakshi Sundaram, Head of the Science Department,  
Stanes Anglo Indian School, Coimbatore**
- 4. Dr. P. Renuka Devi, Assistant Professor, Biotechnology, AURCC**

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



The students practiced the art of pitching their innovation within the given time of 4 Minutes and have also explored the concept of converting their ideas into business by presenting their Business Model Canvas in the process.



Presentations were made using Charts to spur creativity of the students and to develop their presentation skills. They will reply more on their own presentation rather than computer generated slides and pictures.

Also, not all students have the privilege to own laptops or computers to prepare PowerPoint Presentations.



**Valedictory Session - Announcement of TNIIC Coimbatore Zone Winners and Certificate Distribution - 04:00pm to 05:00pm.**

The Valedictory Session was presided over by respected Dean of AURCC Prof. Dr. K. Ravichandran and Honourable Jury for the Final Pitch Session. Dr.K.Kanthavel welcomed the dignitaries on the stage and thanked the almighty, respected Dean, Deputy Director (PMO) EDII-TN, students, parents, teachers and credited his team for all the hardwork and efforts taken for organizing the 4-Day Residential Training Workshop.



Th. R.Shiva Shankar, Deputy Director (PMO), EDII-TN addressed the students, parents and teachers and explained about the various support schemes and programmes conducted by EDII-TN and sincerely thanked the efforts taken by Dr. K.Kanthavel and his ED Cell Team Th. Sekar, Th. Sam Jaikumar and Th. K. Saranya



Respected Dean, Prof. Dr.K.Ravichandran felicitated the Jury and EDII-TN Deputy Director (PMO) with Mementos and addressed the students and teachers. He appreciated the efforts the teachers have taken to shape their student's learning and life and credited them as the real heroes. Dean, thus gave a motivational speech and further appreciated the IEDP Hub Activities taken by Dr.K.Kanthavel

and that programmes like TNIIC and TNSI are of great value and significance for the growth of the students and this country.

Th. S. Meenakshi Sundaram, one of the most respected and beloved science teachers credited the programme with much praise. He appreciated the efforts taken by AURCC, EDII-TN and School Education Department, GoTN to inculcate innovation and entrepreneurship in student's mind and heart are commendable. He further added that in the 25 years of teaching, he has come across the different student mentalities over the years, and now times are changing, entrepreneurship, business and various life skills are needed now to be taught in schools extensively. He appreciated the presentations made by the students and with the Jury, has announced the Winners of TNIIC Stage 2 Coimbatore Zone.



The Certificates duly signed by EDII-TN and School Education Department were distributed to the students and teachers by Prof. Dr.K.Ravichandran, Dean of AURCC and the Jury.

**TAMIL NADU ILAM INNOVATORS CHALLENGE 2019****STAGE 2 – COIMBATORE ZONE WINNERS**

Out of the participating 26 Schools from 7 Districts, The following 3 Schools were selected by the Jury as the Winners for Stage 2 – Tamil Nadu Ilam Innovators Challenge 2019 – COIMBATORE Zone.



- 1. Government High School, Kanuvai (Coimbatore District)** - The student's parent is a welder by profession, and he has taken the concept of empathy to feel his father's pain and wanted to make a welding mask that is light weight and easy to use with minimum lux and microfiber filtration masks inbuilt.
- 2. Government Hr Sec School, Seenapuram (Erode District)** - They have prepared a proof of concept of using trash (Organic and Inorganic) as fuel using their father's bike and made it as an hybrid low cost motorbike. Their next step is to test the sustainability component of their concept.

**3. Adharsh Vidyalaya Matric Hr Sec School (Tiruppur District) -**

Agriculture – partnership model with TNAU and agricultural machinery manufacturers to cater to the needs of the farmers both as a service and as an application. They have already created the application and are working on building solid data and regionalised voice commands for farmers

Certificates were issued to all the participants and winners duly signed by the Hub Coordinator of EDII-TN IEDP Coimbatore Hub, Anna University Regional Campus Coimbatore and District Education Officer, Perur, Coimbatore District, School Education Department, Government of Tamil Nadu on behalf of the Chief Education Officer of Coimbatore District.

**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. The feedback forms were evaluated. The Students and Teachers appreciated the Training Methods and Approaches taken by our partnering Startups, who have delivered on their part wonderfully well. Also, Special Mention and Gratitude was shown towards the Hub Coordinator, ED Cell Coordinators, Student Volunteers and District Captains, who made this programme a grand success by all means.

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

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

Overall Experience    -    4.5

Overall Learning    -    5 (Majority)

Stay (Room)    -    5

Food & Snacks    -    5

Hall & Classroom    -    4

Information & Updates    -    4



#### **Special Thanks and Mention to Students of AURCC & District Captains**

<b>T.Saravan Kumar</b>	<b>Priyadharshini.K</b>	<b>Selvapreethi.K</b>
<b>J.Edisonthangaraj</b>	<b>Hariharan.S</b>	<b>Susma Albert Coraya</b>
<b>G.Kaviya</b>	<b>Saravanachandru.S.K</b>	<b>D.Bhuvaneswari</b>
<b>M. Sudhersanan</b>	<b>Tharangini.M</b>	<b>G.Varshini</b>
	<b>Madhumitha.B</b>	<b>R.Shibi</b>
	<b>Hari babu</b>	<b>A.Gopinath</b>
	<b>Dhinesh kumar</b>	<b>S. Kavichelvan</b>

#### **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)

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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/>

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