



Date: 10<sup>th</sup> April, 2023

To,

**Mr. Rangaswamy K R**  
**Linde South Asia Software Company**

Respected Sir,

Greetings from STEM Learning! STEM, is a Private limited company working as a social enterprise in providing the children from lesser privileged communities' access to quality science education. STEM is a CSR solution in positively impacting education. STEM Learning was conceptualized with an aim to empower Children from rural and semi urban communities with the basic concepts of STEM (Science, Technology, Engineering and Mathematics).

Our Program involves setting up of Mini Science Centres in schools to help Children from standard 5 to standard 10 by implementing Corporates CSR in Government and Government aided schools situated in the low-income communities. In this regard, we propose Linde South Asia Software Company for the sponsorship of settingup of Mini Science Centres (MSC) in the schools that you are already working in or you would like to work.

We solicit your support in helping us set up MSC in Government schools to help children from these Schools Overcome the fear of Science and Math's and thus develop aptitude-based learning.

In continuation with this letter is a detailed proposal for your consideration and perusal. We look forward to hearing from you with your support.

Thanking you,

**Nagdev R**  
**Corporate Relationship Manager**  
**STEM Learning Private Limited**

## Strategic Proposal for Mini Science Centre 1 Schools



*Mini Science Centre    Teacher Training Program    Science Competition    Monitoring & Evaluation*

### Contact Persons:

Name: **Mr. Ashutosh Pandit**  
Designation: Founder & MD  
Organization STEM Learning Pvt. Ltd.  
Email: [ashutoshstemlearning@gmail.com](mailto:ashutoshstemlearning@gmail.com)  
Telefax: - 022 24933738  
Website: [www.stemlearning.in](http://www.stemlearning.in)

Name: **Nagdev**  
Designation: Corporate Relationship Manager  
Organization STEM Learning Pvt. Ltd.  
Email: [nagdev.r@stemlearning.in](mailto:nagdev.r@stemlearning.in)  
Mobile: 9742022965/9739737716

**Project Support requested under the Corporate Social Responsibility**

**Contents**

- ▶▶ ABOUT US.
- ▶▶ MISSION, VISION, GOAL, OBJECTIVES.
- ▶▶ STRATEGIC AREA OF FOCUS, PROJECT NEED.
- ▶▶ PROJECT SUMMARY STATEMENT, EXPECTED OUTCOME.
- ▶▶ STEM PROJECT LOCATIONS, LIST OF ACTIVITIES.
- ▶▶ PROJECT MONITORING-TOOLS & IMPLEMENTATION PROCESS.
- ▶▶ TIMELINE PLAN & PROJECT SUSTAINABILITY.
- ▶▶ VALUE ADDITION [VOLUNTEER ENGAGEMENT].
- ▶▶ BRANDING.
- ▶▶ PROGRAM LOG FRAME.
- ▶▶ SWOT ANALYSIS.
- ▶▶ BUDGET.

**Annexure:**

- i. LIST OF 80 MODELS

## About: STEM Learning Pvt Ltd.

STEM Learning was conceptualized with an aim to inculcate basic concepts of Science, Technology, Engineering, Mathematics at school level, thereby encouraging inclination of students / learners towards science and technology. Models designed by STEM help students in identifying and experiencing the actual concepts which they learn from text books making it more practical in approach

STEM believes that school education can't be only visual or audio but it is important for the children to practically feel the products and experience it. With this vision, STEM has customised 80 models based on 150+ concepts of Science and Maths for better learning and understanding of the concepts. STEM believes in adding more models for improved learning of students specially for those from less privileged section of the society.

STEM through its MSC's have benefitted over 1 Million students with 8000+ teachers in 1900 + schools across 23 states in India. In addition to this, STEM learning also has a niche in installing 30 big science centres in different talukas of Maharashtra under Manav Vikas Mission Project of Maharashtra Government. These science centres have trained more than one lakh students who otherwise would have never got chance to experience and explore science in a practical and easyway.

STEM's models are approved by **6 SCERT- Maharashtra, Goa, Chhattisgarh Odisha Nagaland and Jammu & Kashmir** for their alignment with the curriculum and the approvals by the SCERT's of Andhra Pradesh, Telangana and Karnataka are awaited for approval.

**1. A: Mission Statement – To enhance students' aptitude towards science & math so that they embrace it and grow with it while relishing the learning process.**

**1. B: Vision Statement: To be recognized globally for bringing innovative learning products in School Education and contributing to the society by reaching to the less privileged students**

**1. C Goal: Learning made accessible to all children for aptitude enhancement.**

**1. C.1: Immediate Goal:** Reaching to Large population of under privileged Children PanIndia

**1. C.2: Aim:** Ensuring equal opportunities for learning and development of all under privileged Children.

**1. C.3: Immediate Aim:** Reaching 2000 schools in the academic year 2019-20

**1. C.4: Objective:** Empowerment/Enhancement of aptitude of children

**1. C.5: Specific Objectives:** Ignite Scientific interest among children for –

→ Aptitude developed.

→ Eradicate fear of Science and Math's

→ Easy and Fun way method of learning Science and Math's

→ Discovery is a regular process.

→ Scientific knowledge provided for day to day understanding.

→ Exploring Possible stepping stone for career in Science & Math's.

→ Parents Content of learning methodology & feeling secured of their child's future.



### Snapshot of work:



**Model Designing**



**Teacher explaining to Students the model**



**Students undertaking model Designing**



**Students undertaking model Designing**

### 1.0 Strategic areas of Focus

- ▶ **Provide quality teaching aids to improve teaching pedagogy** for students from less privileged section of society.
- ▶ **Enhance aptitude capacity and skills** of students to learn science and mathematics in more effective and interesting way in a two-way approach of benefitting the children and enhance teacher's skills.
- ▶ **Providing a platform to exhibit and execute learning opportunities** for Students and teachers through customized volunteer engagement programs/events.
- ▶ **Create partnership and collaboration** with various stakeholders to ensure programmatic sustainability for the project.

### 2.0 Background and Project Need

The education system in India is undergoing a transformational process with special emphasis on Science and Math's education. Science education in India is faced by various practical challenges today. The first and the most basic problem that has persisted and resisted solution since early education, is our inability

to ease the fear of difficult subjects such as science and math's and make it simple and fun so as to help retain the knowledge and strengthen the foundation of the child for future.

Science is knowledge about the material, natural world. It is knowledge produced from systematic observation, measurement, experimentation, exploration, and speculation and theorization about natural objects, their properties and their interactions. Whether the topic of forces in Physics or the solubility of substances in water from Chemistry, or germination in Biology, the science curriculum directs attention to the material world, to things and processes in it; about which it would like children to learn—to notice, name and think about things based on concepts and theories that characterize these disciplinary approaches, further more mathematics establishes the foundation for calculation is a part of everyday life

However, disciplinary approach is essential in learning BUT it is also imperative to ensure that we make the subject interesting; as, it is a challenge to large percentage of children to comprehend the formulas and equations. This not only limits the learning of students about science & Math's but also lessen the interest of children in these subjects and a fear psychosis is created in their minds for these subjects.

Our honorable Prime Minister during the 104th Indian Science Congress on 'Science and Technology for National Development, emphasized that the government is committed to support the different streams of scientific knowledge from fundamental science to applied science with an emphasis on innovations.

Prime Minister instituted the concept of 'scientific social responsibility'. Underlining the need to inculcate the concept of 'scientific social responsibility (SSR)', akin to corporate social responsibility, PM Shri Modi ji put the impetus on corporates to actively participate in developing science and technology centers across India.

We at STEM Learning provide the Mini Science Centre – (MSC) that support and encourages the students to develop aptitude & skills. Science activities done to stimulate curiosity, provide practical opportunities to explore a concept in easy ways, develop appropriate hands on experience in understanding science and its concepts which is sadly absent today across all our education syllabus. More so with inadequate teaching staff in rural, municipal schools which are for the underprivileged children adds to the existing challenge in the education system.

### **3.1 Project Summary Statement**

**Mini Science Centre (MSC)** is an educative, innovative and systemic instrument designed to revolutionize science & math's education that makes learning simpler and accessible. It is a catalytic channel that is interactive, engaging & fun way of learning technique aimed to raise awareness, grasp the information & strengthen the aptitude of children; furthermore, MSC supports the teachers in teaching - with a focus on concepts from science & math's. Mini science Centre has a range of *80 table top working models with 33 back-drops and manuals in regional language* to provide hands-on experience for learning/teaching Science and Mathematics for Class 5 through 10.

MSC will be a permanent and integral part of the school and academics right from its installation.

The models designed for MSC forms the basis for effective education and better understanding of the academic concepts and their practical applications. Principally these models are ....

- For all students from standard 5 to 10
- Intentional and standards-based
- Active, interesting, and relevant to students
- Reflect current research and practices that are curriculum based
- Age-level appropriate
- Integrate skills from different subjects of Science and Math's



- Incorporate staff training in science and Math's teaching
- Based on ongoing assessment of student needs and progress

### **3.2 Expected outcome of the program –**

- Aptitude of students for learning science and mathematics improved by creating simple, child friendly eco system which is fun and enjoyable.
- Empowering teachers with easy teaching aids.
- Improve teaching pedagogy by use of models in conducting the science and math's class through better engagement of teachers in teaching.
- Increased enrolment and interest in STEM-related courses inschool.
- Continued participation in STEM programming.
- Increased self-confidence in tackling science & Math's classes and projects.
- Shift in attitude about careers in STEM.
- Increased test scores as compared to non-participants.
- Increased general knowledge of science & math's-based concepts.
- Gains in 21st century skills, including communication, teamwork, and analytical thinking.
- Higher likelihood of graduation and pursuing a STEM career

### 3.3 Project Location & Support Request: Karnataka.

The budget is for 1 school for 1 MSC for 1 Year					
SR.NO	ITEM	DESCRIPTION	COST	NOS OF SCHOOLS	TOTAL
1	MINI SCIENCE CENTRE	80 MODELS + 80 USERS PLACARD+ 40 COLOURFUL BACKGROUNDS + 1 SAFETY PLACARD + 1 TEACHERS MANUAL INCLUDES INSTALLATION, DELIVERY & 1st YEARS MAINTENANCE	290,000	1	290,000
		TAXES @ 18%	52200		52200
		TOTAL	342,200	1	342,200
2	TRAINING OF TEACHERS (TTP)	TRAINING 1st YEAR -2 VISITS	35,000	1	35,000
		TAXES @18%	6300		6300
		TOTAL	41,300	1	41,300
3	MONITORING & EVALUATION	Total - 2 visits	35,000	1	35,000
		TAXES @ 18%	6300		6300
		TOTAL	41,300	1	41,300
4	ANNUAL MAINTENANCE CONTRACT	CLEANING SERVICING & IF REPLACEMENT (if any)	35,000	1	35,000
		TAXES @ 18% ( cost applicable from second years)	6,300		6300
		TOTAL	41,300	0	0
TOTAL (1+2+3)			424,800	0	0
		NET COST FOR PER SCHOOLS (1+2+3)	360,000	1	360,000
		GST@18%	64,800		64,800
		TOTAL COST INCLUDING GST	424,800		424,800
Optional					
5	INFRASTRUCTURE*	SET UP OF PLATFORMS & ELECTRIC CONNECTIONS	35,000	1	35,000
		TAXES @18%	6,300		6,300
		TOTAL	41,300	1	41,300
GRAND TOTAL			466,100		466,100

\*\* The Above quote is valid for 40 days from the date of Submission

\*\* If required Inauguration and volunteer engagement is customized and at additional cost

\*\* Volunteer engagement, Quiz competition, Model designing program and Scientist lecture is customized and at additional cost

\*\* Events can be designed post confirmation of schools, beneficiaries and location.





# STEM

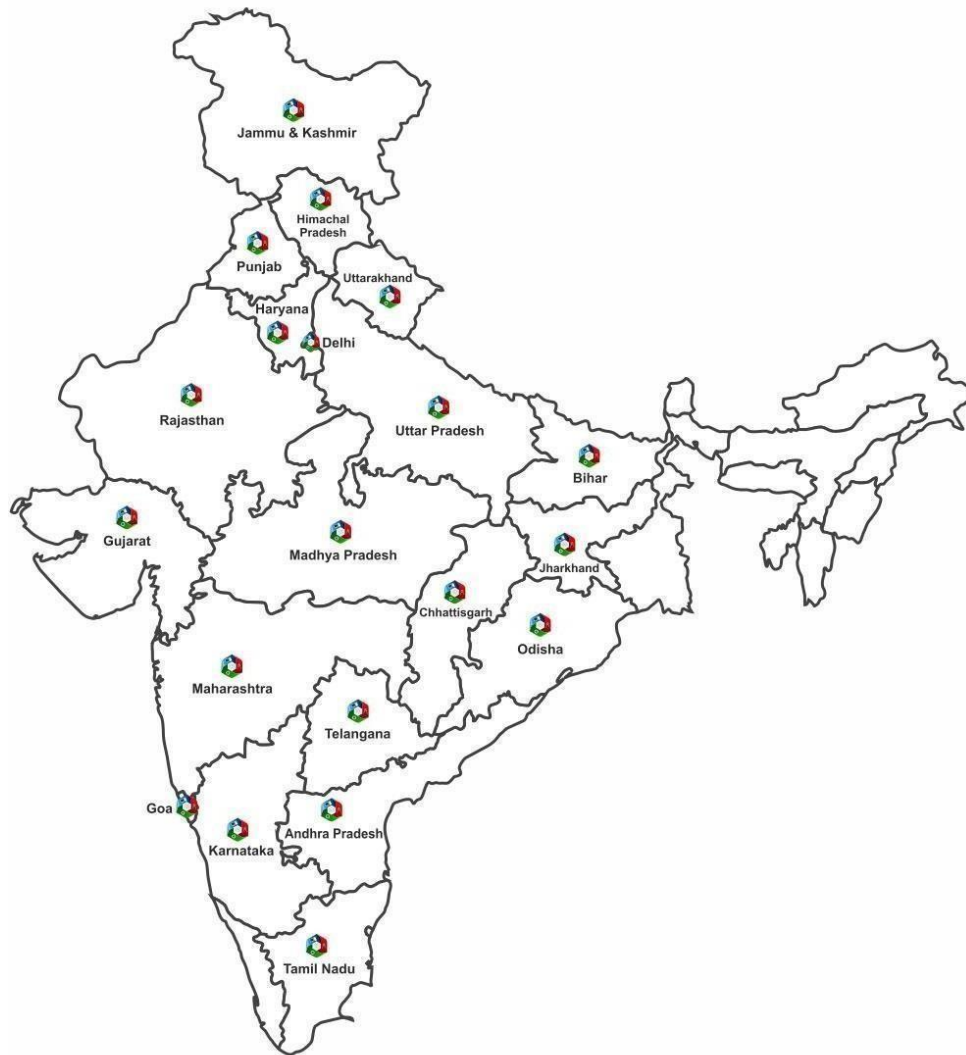
*Building Brains.....Beyond Books.....*

**3.3 C Branding & Visibility** – Mini Science Centre provides immense visibility and branding for the sponsor partner. Starting from the entrance of the Centre to the backdrops and reference leaflet, the name and logo of the sponsor partner is inscribed. Each model is also labeled with the corporate partner's name and logo.

## MSC Locations: PAN INDIA

STEM learning has pan India presence in 23 states of India and have proven our process of Installation, delivery- Teachers Training Program along with Monitoring & Evaluation and Maintenance of MSC.

1. Maharashtra
2. Rajasthan
3. Gujarat
4. Karnataka
5. Himachal Pradesh
6. Jammu & Kashmir
7. Goa
8. Haryana
9. Delhi
10. Tamil Nadu
11. Uttar Pradesh
- 12.



- Jharkhand
13. Chhattisgarh
14. Madhya Pradesh
15. Andhra Pradesh
16. Odisha
17. Telangana
18. Bihar
19. Uttarkhand
20. punjab
21. Odisha
22. Dadra and Naqar Haveli
23. Assam

#### 4.0 Salient Points

<b>STEM-Mini Science Centre (MSC)</b>	
▪	<b>Owned by school from day 1.</b>
▪	<b>Fixed Infrastructure- Permanent Branding for Corporate.</b>
▪	<b>24 X 7 accesses to students and teachers.</b>
▪	<b>In school program as it's based within the school premises.</b>
▪	<b>80 plug and play models + 40 backdrops -Mapped to 150+ Concepts of Maths &amp; Science.</b>
▪	<b>Student's analytical skills developed to enhance constructive imagination.</b>
▪	<b>Certified by 6 SCERTS- Goa, Chhattisgarh, Maharashtra and Jammu &amp; Kashmir, Odisha &amp; Nagaland</b>
▪	<b>Empowerment of teachers for sustainability by way of Peer lead teacher training.</b>
▪	<b>2 - Teachers Training Program – specially designed training to ensure comfort and ownership from day 1. DIY Activity session with students &amp; Webinar Session with Teachers.</b>
▪	<b>2 - Monitoring &amp; Evaluation to capture data so as to ensure proper reporting to donors.</b>
▪	<b>Easy up scaling and replication.</b>

## 5.0 Work Plan Narrative:

ACTIVITY.	PROCESS NARATIVE.	Means of Verification.	Time period.	REPORT.
IDENTIFICATION.	<p>STEM initiates the process post Contract &amp; PO with clarity on geography &amp; nos of schools required, post that the M&amp;E team connect with DOE, if it's a government recognized school, {for private aided school [ don't need DOE permission]</p> <p>Post letter from DOE, we approach the school authorities and get their acceptance letter along with their contact details of principal and teachers involved, the letter clarifies the ownership details of cleanliness, handling of models, material and electricity, we also share the expected outlay plan { installation requirement} for MSC set up with school and donor.</p> <p><u>DATA collated:</u></p> <ol style="list-style-type: none"> <li>School location.</li> <li>Room availability as per out lay plan.</li> <li>Letter of acceptance.</li> <li>Student's strength in school.</li> </ol> <p>Post this we give work order to our Factory team that will assemble and move on for delivery, prior to departure of</p>	<p>The documents supporting this activity is:</p> <ol style="list-style-type: none"> <li>DOE letter if applicable</li> <li>School letter with details of principal, teacher along with clarity on electricity and maintenance.</li> <li>Photos of pre MSC School and room.</li> <li>Gender Segregation details.</li> <li>Cumulative grades of students along with number of students in class/division.</li> </ol> <p><b>This report will be known as School Identification Report.</b></p> <p><i>Attached: school Identification parameters</i></p>	<p>Contract &amp; PO- 2 weeks.</p> <p>School Identification &amp; Closure – 3-5 weeks.</p>	School Identification report.



INSTALLATION	<p>material the school is checked by our backend team for its readiness ( if any furniture Work then that's extra to be charged to the donor)[ as per the MSC set up layout plan].</p> <p>On receiving clearance from the school, the installation team proceeds to the location and starts the installation.</p> <p>On reaching the Installation team takes picture of the room and then another picture taken after the installation and a letter of successful installation and handing over materials/documents.</p>	<p>The documents supporting this activity is:</p> <ol style="list-style-type: none"> <li>Pre room set up picture.</li> <li>Post room set up picture.</li> <li>Letter from school of completion of installation of MSC with (80 models, 40 backdrops + 1 safety measure board =40,1- Teachers manual, 40 placards of models).</li> </ol> <p><b>This will be known as Installation report.</b></p>	<p>Installation- 3 weeks from school closure.</p> <p>Installation – 2 days at location, if all is ready.</p>	Installation Report
Teachers Training Program- 1 <sup>st</sup> .	Trainer's team gets in touch with School authorities- Principal & teachers	<p>The documents supporting this activity is:</p> <ol style="list-style-type: none"> <li>Call sheet.</li> </ol>	Immediately on receiving closure of	1 <sup>st</sup> Teachers Training Report.





Teachers Training Program- 2 <sup>nd</sup> .	<p>Schedules the training date &amp; venue.</p> <p>72 hours before training – reconfirmation is taken from principal and teachers.</p> <p>Initiate training, the training consists of :</p> <ol style="list-style-type: none"> <li>1) Orientation of Models. (attached Training flow document)</li> <li>2) Usage as per concepts and its 5 daily usage. ( Attached an example of some concepts)</li> <li>3) Mapped document of Model with curriculum. ( attached 7</li> <li>4) 75 Models mapping with Curriculum)</li> <li>5) Establish topics and usage as per the timetable.</li> <li>6) Explain follow up process → Phone calls. → Whatsapp support group formation.</li> <li>7) Expected output from teachers of documentation of usage, as they are plug and play and can be taken to class for demonstration and explanation. ( attached Pictures and Video)</li> <li>8) Register of MSC, as they are plug and play and can be demonstrated in class during the concept clarity.</li> </ol>	<ol style="list-style-type: none"> <li>b. Whatsapp group snap shot.</li> <li>c. Goal set Document for output.</li> <li>d. Teacher’s attendance sheet of training.</li> <li>e. Pictures and Videos (if possible).</li> </ol> <p>This report will be known as 1<sup>st</sup> <b>Teachers Training program report.</b></p> <p>The above same data will be part of the 2<sup>nd</sup> <b>Teachers Training Program report.</b></p>	<p>installation set up-</p> <p>10 days from installation the 1<sup>st</sup> Teachers training program is undertaken .</p> <p>/</p> <p>15 days after 1<sup>st</sup> M&amp;E visit.</p>	2 <sup>nd</sup> Teachers Training Report.



	<p>9) Identify and prioritize issues to be dealt by teachers.</p> <p>10) Set up goals for best practice documentation.</p> <p>11) Inform about M&amp;E visit and process.</p> <p>The same above process is follow for 2<sup>nd</sup> Teachers training post.</p>			
Follow up Visit 1 <sup>st</sup> .	<p>The team initiates the follow up visit with getting in touch with Principal &amp; teachers of the visit and the same is updated on the WhatsApp group.</p> <p>Reconfirms the same 72 hours before departure.</p> <p>The M&amp;E consists of:</p> <p>Collating data on:</p> <ol style="list-style-type: none"> <li>Nos of students per class/division.</li> <li>Cumulative grades of students.</li> <li>Gender segregation.</li> </ol> <p>the Principal and teachers' questionnaire will be qualitative, students will be quantitative and qualitative with FGD and IDI.</p> <p>The students quantitative tools will be:</p> <ol style="list-style-type: none"> <li>Fill in the blanks.</li> <li>Match the columns.</li> <li>Questions and 3 Options.</li> </ol>	<p>The documents supporting this activity is:</p> <ol style="list-style-type: none"> <li>Call sheet.</li> <li>WhatsApp group snap shot.</li> <li>Questionnaire.</li> <li>Notes of FDG &amp; IDI.</li> <li>Pictures and Videos (if possible).</li> <li>Raw data in excel.</li> <li>Draft M&amp;E report and Finalized M&amp;E report.</li> </ol> <p><b>This report will be known as 1<sup>st</sup> M&amp;E report.</b></p>	<p>45 days from 1<sup>st</sup> TTP.</p> <p>/*-5512</p>	<p>1<sup>st</sup> Monitoring &amp; Evaluation Report.</p> <p>(Formative Baseline)</p>



Monitoring & Evaluation-2 <sup>nd</sup> Visit (1 <sup>st</sup> Year annual report).	<p>4) Pictorial Identifications of models.</p> <p>Qualitative:</p> <p>FGD and IDI lead questions will be framed for students on actual usage in class and MSC.</p> <p>The same above process is followed for 2<sup>nd</sup> M&amp;E (1<sup>st</sup> Year annual report).</p>	The above similar process will be used for 2 <sup>nd</sup> M&E ( <b>1<sup>st</sup> year baseline report</b> ).	<p>1<sup>st</sup> Draft in 3 weeks' time for M&amp;E visit.</p> <p>2<sup>nd</sup> M&amp;E Visit -45-60 days after maintenance visit.</p>	2 <sup>nd</sup> Monitoring & Evaluation Report ( 1 <sup>st</sup> Years baseline)
Maintenance.	<p>The maintenance will visit the school after the 1<sup>st</sup> M&amp;E visit.</p> <p>The visit will notify the school of visit and reconfirm 72 hours prior to departure</p> <p>The maintenance will undertake:</p> <ol style="list-style-type: none"> <li>Repairing and Replacement as and where required.</li> <li>Re-clean the premises.</li> </ol> <p>The free maintenance is for 1<sup>st</sup> year only, year 2 onwards will be charged.</p>	<p>The documents supporting this activity is:</p> <ol style="list-style-type: none"> <li>Pictures of repaired model</li> <li>Pictures of replaced model</li> <li>Signed report of maintenance from Principal/Teacher</li> </ol> <p><b>This report will be known as Maintenance report.</b></p>	15 <sup>th</sup> days after 1 <sup>st</sup> M&E visit.	Maintenance Report
Volunteer Engagement.	During the closure of contracts the number of VE activities to be undertaken along with tentative nos of	The documents supporting this activity is:	This activity can be built in by discussion	Volunteer Engagement Report (



# STEM

Building Brains.....Beyond Books.....

	<p>participants is confirmed for providing cost.</p> <p>We provide following avenues for VE:</p> <ul style="list-style-type: none"> <li>✦ Community Engagement:- In which we will invite government officials to talk to the school or experts from the organization to give talk on connects between school learning and corporate business to further enhance their knowledge and understanding of the product correlation in real life.</li> <li>✦ Quiz: The corporate can develop a databank of quiz as games on their existing school subject of Math's and Science.</li> <li>✦ Model Learning: As to how various scientific and Mathematical models are developed for easy learning.</li> <li>✦ Support in creating database of online reference/videos/we bsite to be offered as support reference material.</li> <li>✦ STEM career opportunities in the Industry- Talk by VE team on future prospects.</li> </ul>	<ul style="list-style-type: none"> <li>a. Picture and Videos.</li> <li>b. Activity Report.</li> </ul> <p><b>This will be known as Volunteer engagement report (activity based report will be provided).</b></p>	With donor and school.	activity based)
--	---	---	------------------------	-----------------

\* 7 reports will be generated over the 1<sup>st</sup> year

STEM learning has a qualified team for Installation, Training, M&E & Maintenance and there is no individual coordinator appointed for the project and responsibility is as per the activity.

### 5.1 Tentative Time line Plan:

PO & Contract.	School Identification.	Installation.	1-TTP.	1 <sup>st</sup> Follow up .	2 <sup>nd</sup> TTP.	Maintenance.	2 <sup>nd</sup> M&E.( Annual Report)
1 <sup>st</sup> week	Within 2 -3 weeks from PO.	3-weeks from school identification & Closure.	15to20 Days from installation.	45 days from 1 <sup>st</sup> TTP.( ?)	15-20 <sup>th</sup> Day from 1 <sup>st</sup> Follow-up.	20 to 25 weeks from Installation	35 <sup>th</sup> to 40 <sup>th</sup> week from Installation

### 6.0 Project Sustainability:

STEM Learning look at sustainability from two aspects namely programmatic and Financial.

#### 6.1 Programmatic Sustainability:

The programmatic sustainability is achieved by undertaking the following actions:

- Mini Science Centre model is replicable and scalable program.
- Zero Operation Cost.
- MSC enhances the very basic requirement of the schools to support its existingsyllabus.
- A vibrant network of teachers will be available for training 3rd year onwards, creating a peer lead program.

#### 6.2 Financial Sustainability:

STEM Learning shall provide on request the financials for year three onwards for basic support of the Program.

### 7.0 Value Addition: (Volunteer Engagement {optional-at cost})

1. **Industry Engagement:-** In which we will invite an expert /experts from the organization to give talk on connects between school learning and corporate business to further enhance their knowledge and understanding of the product correlation in reallife
2. **Quiz:** The corporate can develop a databank of quiz as games on their existing school subject of Math's and Science
3. **Model Learning:** As to how various scientific and Mathematical models are developed for easy learning
4. Support in creating database of online reference/videos/website to be offered as support reference material.
5. STEM career opportunities in the Industry- Talk by VE team on futureprospects
6. And many more.....

#### 7.1 Branding:

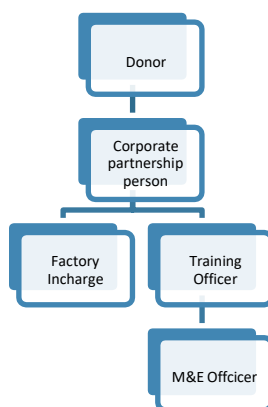
STEM MSC ensures long term branding initiating with installation at the school and will carry updates on its various social media platforms, more so the MSC becomes a permanent fixture in the school premises ensuring long term visibility and branding.



## 8.0 Roles & Responsibilities

Role	Responsibilities
Corporate partnership person	Closure of Project process.
Training Officer	Undertaking Training and Reporting.
M&E Officer	Ensuring M&E Protocols and Reporting.

## 9.1 Data Flow



## 9.2 Data Management

### Storage

The data will be stored on secured computer of the M&E Officer and will be stored in spread sheet, database, hard copies, etc.

The data will remain till the life of the project

### 9.4 Analysis

Basic Excel sheet tools will be used by the data entry person and if need be specialized analysis tools such as SPSS or any similar will be used.

### 9.5 Privacy

The DATA will be exclusively with the Company founder, Program officer of the specific project and M&E

## 10.0 SWOT Analysis:

### STRENGTHS (Internal factors)

- ✓ Timely set up of MSC.
- ✓ 80 Models& 40 backdrops aligned with curriculum.
- ✓ Structured TTP.
- ✓ Planned Follow-up M&E Process.
- ✓ WhatsApp Group for better connectivity & response.
- ✓ Vibrant Volunteer engagement programs.

### WEAKNESS (Internal factors)

- ✓ Probable delay in delivery in models for MSC.



# STEM

Building Brains.....Beyond Books.....

<p><b>STRENGTHS ( EXTERNAL FACTORS)</b></p> <ul style="list-style-type: none"> <li>→ Only structured program that has been certified by 6 SCERTS aligning with educational curriculum.</li> <li>→ Trust of more than 150 donors.</li> <li>→ Successfully implemented Program Pan India in 23 states in more than 1900 schools.</li> </ul>	<p><b>WEAKNESSS ( EXTERNAL FACTOR)</b></p> <ul style="list-style-type: none"> <li>→ School withdrawal or no support.</li> <li>→ Non Availability for training on scheduled dates.</li> </ul>
<p><b>OPPORTUNITY (INTERNAL FACTORS).</b></p> <ul style="list-style-type: none"> <li>✓ Constantly up grading its process and offerings.</li> <li>✓ Constant development of new modules.</li> </ul>	<p><b>THREAT (INTERNAL FACTORS).</b></p> <ul style="list-style-type: none"> <li>✓ None, as the organization is managed by professionals and overseen daily by its Founder and MD.</li> </ul>
<p><b>OPPORTUNITY (EXTERNAL FACTORS)</b></p> <ul style="list-style-type: none"> <li>→ To constantly better our TTP and M&amp;E by learning's, experience and donor value addition.</li> </ul>	<p><b>THREAT (EXTERNAL FACTORS).</b></p> <ul style="list-style-type: none"> <li>→ Probable non acceptance of additional responsibility by school administration.</li> <li>→ Probable delay in taking ownership beyond the project period.</li> </ul>

## Annexure 1:

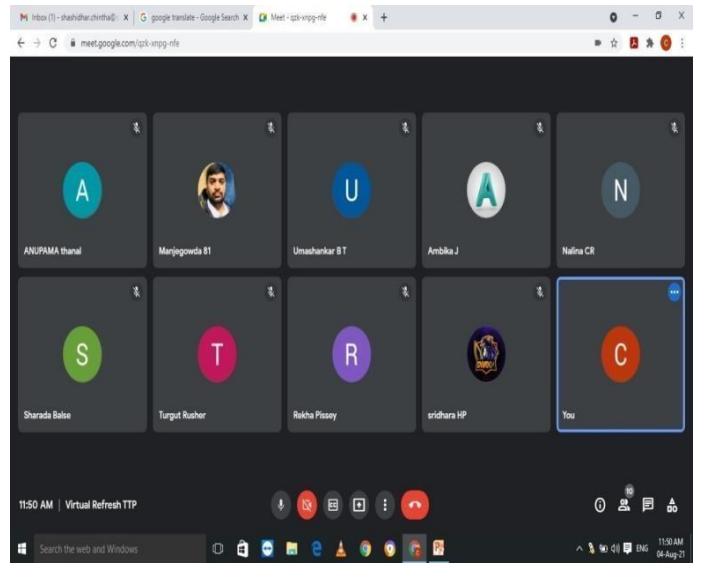
<u>Sr no.</u>	<u>Name of the model</u>	<u>Sr no.</u>	<u>Name of the model</u>
1.	Constellation Viewer	41.	Transverse wave pendulum
2.	Newton's Disc	42.	Area of triangle
3.	Colour Shadow	43.	Area of parallelogram
4.	Periscope	44.	Coupled Pendulum
5.	Kaleidoscope	45.	Solar Light
6.	Laws of Reflection	46.	Wind Mill
7.	Corner Mirror	47.	Shape of earth due to rotation
8.	Infinity Tunnel	48.	KE PE Track
9.	Magic Water Tap	49.	Loop The Loop
10.	Total Internal Reflection.	50.	Rope Puzzle
11.	Fun with Magnets	51.	Refraction Cylinder
12.	Law of Inertia	52.	Newton's Cradle
13.	Circle and Ball	53.	Centrifuge Puzzle
14.	Action and Reaction	54.	Hand Battery
15.	Parrot in the Cage	55.	Periodic Table
16.	Zoetrope	56.	Cone Run Uphill
17.	Pin screen	57.	Tower Of Pisa
18.	Floating Ball	58.	Lever
19.	Floating Fan	59.	Pulley Block
20.	Tornado	60.	Wheel and Axel
21.	Hand Pump	61.	Heat Absorption
22.	Anamorph	62.	Day and Night
23.	Floating Magnets	63.	Viscosity Tube
24.	Magnetic Field Tube & Immiscible Fluid	64.	Rock and Minerals
25.	Moment of inertia	65.	DNA
26.	Lazy Tube	66.	Lateral Shift
27.	Hyperbola	67.	Force & types of friction
28.	Magnetic effect of electric current	68.	Funny mirrors
29.	Pythagoras Model & Moire Pattern	69.	Marble Slide
30.	Elliptical Carrom Board	70.	Resonance
31.	Two Congruent Right Triangles	71.	Weight Illusion
32.	Area of a Circle	72.	Area of Trapezium
33.	$(a+b)^2 = a^2 + 2ab + b^2$	73.	Sum of angles of Quadrilateral
34.	$(a+b+c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$	74.	$(A+B)^2 - (A-B)^2 = 4AB$
35.	$a^2 - b^2 = (a+b)(a-b)$	75.	Electric bell
36.	Sum of the angles of a triangle	76.	Human Torso
37.	Tangram	77.	Ear & Eye
38.	Parking Puzzle & T puzzle	78.	Human Joints
39.	Organ pipes	79.	Plant Cell
40.	Area of rhombus	80.	Animal Cell

MINI SCIENCE CENTRE PHOTOS –





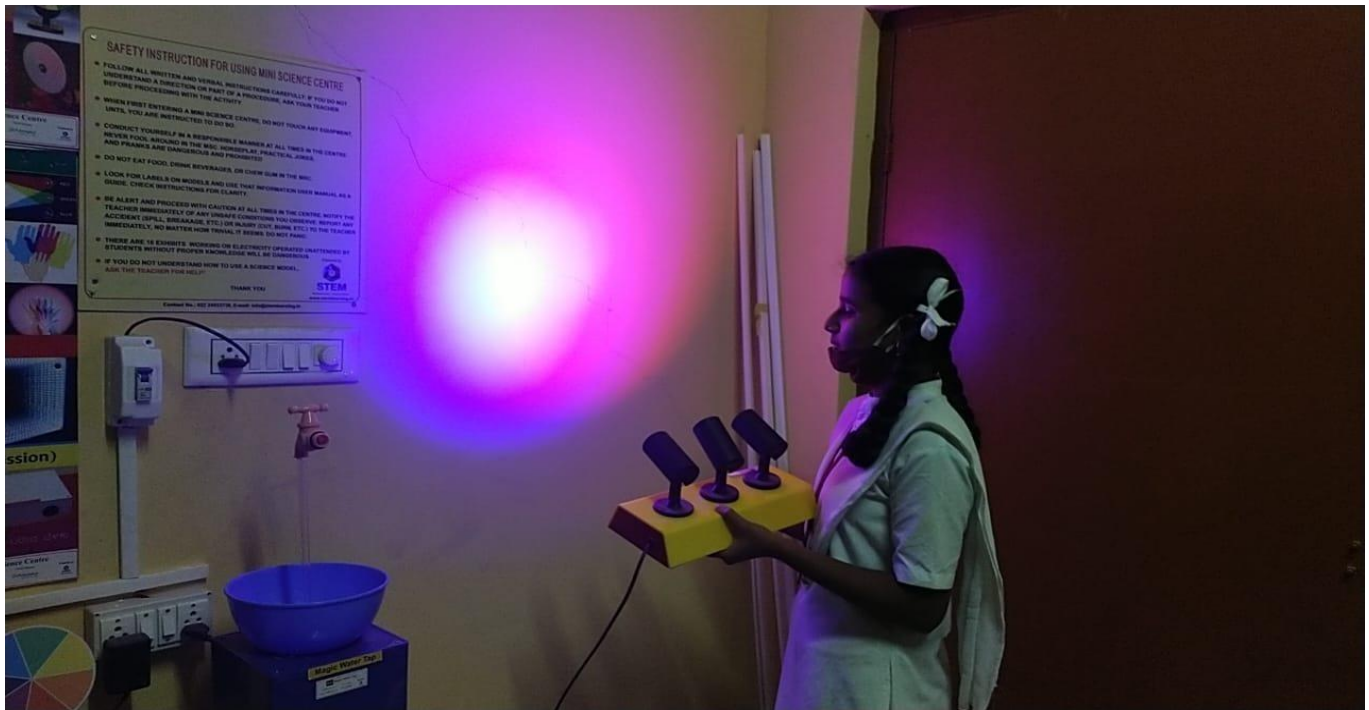
### Virtual Teacher Training Program Photos:



### Teachers Explaining Science & Math's Concepts:



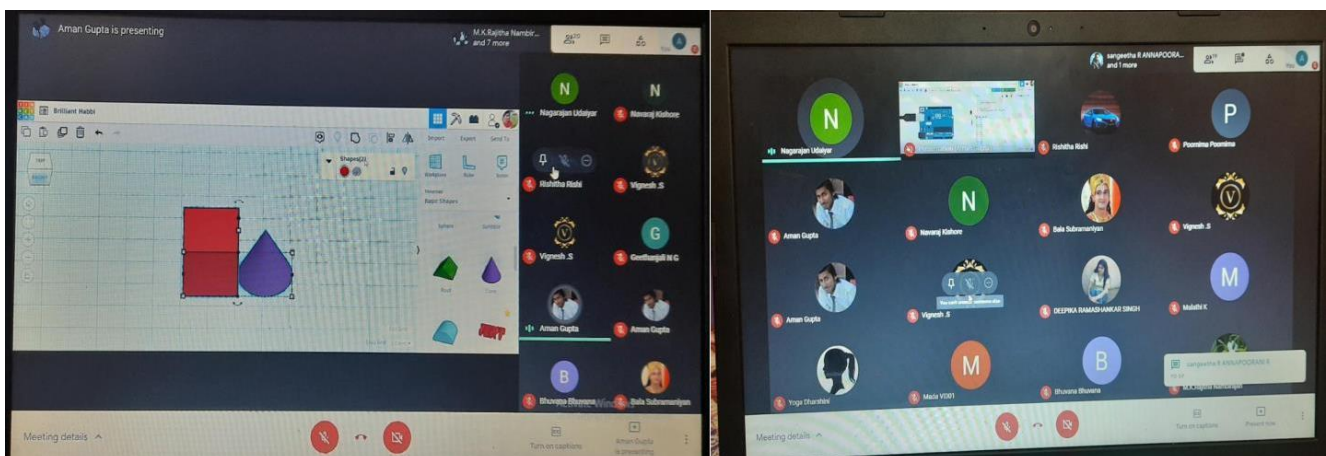




Teachers Training Program at school:



DIY Model making session with Students:



## E-Volunteering activities with our partner Brillio

### Some e-Volunteering activities with our partner Brillio



Volunteers  
Conducting  
Quiz  
Session



Volunteers  
Conductin  
g Model  
Making  
Session



Microsoft  
Digital  
Literacy  
Program for  
Teachers



Volunteer  
s  
Training  
Students

## Virtual E-Volunteering with Accenture Team:





## STEM National Competition:











**STEM**  
Building Brains.....Beyond Books.....

## National Award received by Teachers:

Karnataka Education Minister **Shri. Suresh Kumar** sir visited STEM Mini Science Centre which was installed in Government High School Doddabanhalli, Bengaluru & appreciated Mr. Nagaraj sir, a science Teacher for receiving National Award for his Innovative skills in teaching Science Concepts by using models and experiments.



## ಬೆಂಗಳೂರು ಶಿಕ್ಷಕ ನಾಗರಾಜುಗೆ ರಾಷ್ಟ್ರ ಪ್ರಶಸ್ತಿ ದೆಹಲಿ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಆನ್‌ಲೈನ್‌ನಲ್ಲಿ ಭಾಗಿ | ಬೆಂಗಳೂರಿನಲ್ಲಿ ಸಿಎಂ ಪ್ರದಾನ

### • ಕನ್ನಡಪ್ರಭ ವಾರ್ತೆ ಬೆಂಗಳೂರು

ಕೇಂದ್ರ ಸರ್ಕಾರ ನೀಡುವ ರಾಷ್ಟ್ರಮಟ್ಟದ ಉತ್ತಮ ಶಿಕ್ಷಕ ಪ್ರಶಸ್ತಿಗೆ ಭಾಜನರಾದ ಬೆಂಗಳೂರಿನ ದೊಡ್ಡಬನಹಳ್ಳಿ ಸರ್ಕಾರಿ ಪ್ರೌಢ ಶಾಲೆಯ ವಿಜ್ಞಾನ ಶಿಕ್ಷಕ ಸಿ.ಎಂ. ನಾಗರಾಜು ಅವರಿಗೆ ಭಾನುವಾರ ವಿಧಾನ ಸೌಧದಲ್ಲಿ ನಡೆದ ಶಿಕ್ಷಕರ ದಿನಾಚರಣೆ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಪ್ರಶಸ್ತಿ ಪತ್ರ ಪ್ರದಾನ ಮಾಡಿ ಮುಖ್ಯಮಂತ್ರಿ ಬಸವರಾಜ ಬೊಮ್ಮಾಯಿ ಸನ್ಮಾನಿಸಿದರು.

ಇದಕ್ಕೂ ಮುನ್ನ ಶಿಕ್ಷಕ ನಾಗರಾಜು ಅವರು ದೆಹಲಿಯ ರಾಷ್ಟ್ರವೆತ್ತಿ ಭವನದಲ್ಲಿ ನಡೆದ ರಾಷ್ಟ್ರಮಟ್ಟದ ಉತ್ತಮ ಶಿಕ್ಷಕ ಪ್ರಶಸ್ತಿ ಪ್ರದಾನ ಸಮಾರಂಭದಲ್ಲಿ ಬೆಂಗಳೂರಿನಿಂದಲೇ ಮಾರ್ಕವಲ್ ಕಾರ್ಯಕ್ರಮದ ಮೂಲಕ ಪಾಲ್ಗೊಂಡರು. ದೆಹಲಿ ಕಾರ್ಯಕ್ರಮ ಮುಗಿದ ಕೂಡಲೇ ರಾಜ್ಯ ಪ್ರಾಥಮಿಕ

ಮತ್ತು ಪ್ರೌಢ ಶಿಕ್ಷಣ ಇಲಾಖೆ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ ಉಮಾಶಂಕರ್ ಅವರು ಶಿಕ್ಷಕ ನಾಗರಾಜು ಅವರನ್ನು ವಿಧಾನ ಸೌಧದ ತಮ್ಮ ಕೊಠಡಿಗೆ ಆಹ್ವಾನಿಸಿ ಕೇಂದ್ರ ಸರ್ಕಾರ ಕಳುಹಿಸಿಕೊಟ್ಟಿದ್ದ ಪ್ರಶಸ್ತಿ ಪತ್ರ, ನಗದು ಪುರಸ್ಕಾರವನ್ನು ನೀಡಿ ಸನ್ಮಾನಿಸಿ ಅಭಿನಂದಿಸಿದರು.

ಸಂಜೆ ವಿಧಾನಸೌಧದಲ್ಲಿ ನಡೆದ ಶಿಕ್ಷಕರ ದಿನಾಚರಣೆ ಮತ್ತು ರಾಜ್ಯಮಟ್ಟದ ಉತ್ತಮ ಶಿಕ್ಷಕ ಪ್ರಶಸ್ತಿ ಪ್ರದಾನ ಸಮಾರಂಭದಲ್ಲಿ ಸಿ.ಎಂ.ನಾಗರಾಜು ಅವರನ್ನು ಆರಂಭದಲ್ಲೇ ವೇದಿಕೆಗೆ ಆಹ್ವಾನಿಸಿ ಮುಖ್ಯಮಂತ್ರಿ, ಅವರಿಂದ ಮತ್ತೊಮ್ಮೆ ಸನ್ಮಾನಿಸಿ ಪ್ರಶಸ್ತಿ ಪತ್ರ ನೀಡಿ ಅಭಿನಂದಿಸಲಾಯಿತು. ಪ್ರಾಥಮಿಕ ಮತ್ತು ಪ್ರೌಢ ಶಿಕ್ಷಣ ಸಚಿವ ಬಿ.ಸಿ.ನಾಗೇಶ್ ಸೇರಿದಂತೆ ಹಲವು ಗಣ್ಯರು ಉಪಸ್ಥಿತರಿದ್ದರು.

