

Atal Tinkering Marathon

October 2- October 31, 2017

A. Introduction:

Technology in the present era is so dynamic and ever changing that yesterday's innovation looks passé and each day a new idea is born to challenge the status quo. It has never been like this earlier. In fact every start-up in this fast paced world is born with a spirit of innovation and creativity. **IT ALL BEGINS WITH IDENTIFYING A PROBLEM.** A zeal to change the world we knew of till yesterday.

The objective of the Atal **Tinkering Marathon** is to provide opportunities for students to showcase their potential in a fun filled environment and create a positive attitude towards **Making, Tinkering and Innovating, leveraging ATL equipment.** The focus would be to bring about both powerful and impactful outcomes and contribute to an Innovative India.

The Marathon will be open to all ATL schools across the country who dare to think, dream to create, aspire to make a difference and contribute to the school's success in becoming an Innovation Hub.

The Marathon should focus on students identifying a problem and developing innovative solutions that aligns with the National Agenda of creating a New India by 2022. The innovative solutions should ideally focus on the 6 focus areas in alignment with National Agenda:



The objective of the Tinkering marathon is to bring to the fore students' creativity, innovativeness and problem solving skills. It aims to promote and educate the young minds on how innovation, as an empowering tool, is relevant to their lives and future.

The Tinkering Marathon will serve as a platform for young creative minds to apply their skills to -

- *Identify local and global problems*
- *Develop innovative solutions*
- *Conduct primary market research to develop their proposed solutions*

- *Showcase the solutions as working prototypes*

It will help schools leverage their technological resources made available as a part of ATL space and also encourage students to develop problem-solving, collaboration and creative skills.

The Tinkering Marathon envisages every ATL school to submit their best Innovation entries in the 6 focus areas identified by NITI Aayog, between October 2 to October 31, 2017. These will be evaluated and the top 100 entries will be selected for the Atal Tinkering Marathon National finals, to be held in December, at New Delhi, the dates of which will be announced soon. Of these 100, top 30 will get special recognition and awards.

B. How the Tinkering Marathon is to be organized by the ATL school ?

The school marathon starts on October 2, resulting in showcasing of school's innovation entries on a one day Intra School event that can be scheduled any day between 2nd to 31st October 2017. The selection of the day for organizing the **Tinkering Marathon** will depend on school's convenience.

1. Students should reach out to community stakeholders like Panachayat, farmers, District Magistrate, labour working at nearby construction places, house helpers working in your homes, villages etc. to identify problem statements, under 6 focus areas listed here.
2. Students should explore the difficulties people are facing around them
3. After problem identification, students should develop innovative solutions, in ATLs, leveraging ATL equipment.
4. The schools have to select the best innovations that will be solving community and social problems of India, and submit to NITI Aayog.

The criteria for selection will be based on –

1. *Identification of the problem*
2. *Innovativeness of the solution*
3. *Market Research of other existing solutions solving your identified problem*
4. *Engagement of community (mentors/industry)*
5. *Stage of prototype development (Only working prototype entries will be accepted)*
6. *Next steps for improvisation of your prototypes*

All entries will be evaluated by an esteemed group of judges from Academia and industry experts. **The top entries will be invited by NITI Aayog to present to a panel of judges in December, the dates of which will be announced soon.**

C. How can schools start planning to organize the Tinkering Marathon ?

- i. **Pre-event:**

The schools should gear up towards organizing a trip to the stakeholders and conduct multitude of activities – interviews, video bytes, problems listings, workshops/expert sessions, hands on activities, competitions etc. prior to the Tinkering Marathon day which should prepare the students to identify problems in the community.

Some of the activities that are recommended as a part of the **pre event leading to Tinkering Marathon day** are:

- **Ideation Sessions** – Visit panchayat, farmers, district magistrate, labour working at nearby construction places, maids working in your homes, villages then invite parents, volunteers and organize an **Ideation session** to help students ideate, problem solve and develop innovative solutions.
- **Hour of Tinkering** – Organize hands on **1 hour cyclic sessions** where students tinker and make simple /complex projects. The projects can be an extension of the school curriculum or could be technology solutions related to issues on the 9 focus areas.
- **Ideathon** – Organize an idea day wherein students engage and collaborate to create technology ideas/solutions that can solve day to day problems

The students should be briefed about the intra-school **Tinkering Marathon Day** as finalised by the school and should be given ample time to create prototypes aimed at solving community problems. The school should also send invitations to other schools in the vicinity and ensure their participation for the Marathon day.

It is also suggested that schools invite Parents on the intra-school Tinkering Marathon day to showcase the Marathon outcomes and student innovations.

The schools should create a buzz around the intra-school **Tinkering Marathon** and create awareness about it on the school Facebook page and tag/ mention AIM Facebook.

ii. **During the Event:**

The Tinkering Marathon is open for all ATL schools. As it is a daylong event as mentioned earlier, the schools have the liberty to choose a date between **Oct 2 to 31, 2017**. The schools are encouraged to reach out to experts from communities/ industries well in advance and seek their support in helping students create exemplar prototypes and making the Marathon fruitful and successful.

All pre event activities should lead to **students coming up with prototypes mapped to the 6 focus areas of NITI Aayog**. The schools need to plan in advance the prototypes they want to showcase on the Marathon day. On the Marathon day, the students would showcase all prototypes developed.

iii. **Experience Sharing:**

The schools will leverage social media and create traction about the Marathon. All the activities undertaken by the school pre and during the Marathon will be posted on the school's Facebook (FB) page, tag AIM FB page and Twitter as well. The schools will also post the problem statements and videos developed by students.

ATL Facebook Page - <https://www.facebook.com/Atal-Innovation-Mission-1269534143131857/?ref=bookmarks>

ATL Twitter Handle - @AIMtoInnovate/@NITIAayog

All participating schools will be awarded with e certificate by NITI Aayog.

E. ATL Marathon Outcome:

Following the intra-school Tinkering Marathon event, the schools are required to submit their best ATL innovation entries for consideration of the Atal Tinkering Marathon National Finals to be held in December 2017.

- i. **2 - 3 minute video detailing - problems identified by the students, interviews of various stakeholders who were involved in problem identification, highlights of marathon day, innovative solutions developed by students, demonstrating the working prototypes.**
- ii. **1 page note for the innovative solution developed** -_The note should detail the problem and highlight how the solutions are unique compared to the available ones. (An online form will be available on website for the same soon)

The top 100 entries will be invited by NITI Aayog to present to a panel of judges at the Atal Tinkering Marathon National Finals to be held in December 2017, the dates of which will be announced soon. **The video and the note should be submitted online to NITI Aayog by October 31st 2017.**

F. ATL Helpline

For any queries, please feel free to call the following helpline numbers -

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| Delhi | 8588041201 | Hyderabad | 9177231539 |
| Bangalore | 7022205884 | Chennai | 8220734379 |

Or Email at atlhelp-niti@nic.in

Our AIM Partners - Dell and Learning Links Foundation will provide support in the School Marathon.