

Atal Tinkering Labs

Atal Tinkering Labs (ATL) is a sub-mission under the Atal Innovation Mission of the Government of India. This is an important government scheme administered under the NITI Aayog. In this article, you can read all about Atal Tinkering Labs for the <u>IAS Exam</u>.

Why are Atal Tinkering Labs in News? (Latest)

- On April 9, 2021, the <u>Council of Scientific and Industrial Research (CSIR)</u> decided to adopt 295 Atal Tinkering Labs (ATLs) across the country, with an objective to inculcate scientific research and innovation culture among students. Top research scholars and scientists at CSIR will mentor students at these ATLs and act as resource persons.
- On January 11, 2021, the <u>Indian Space Research Organisation</u> (ISRO) has decided to adopt 100
 Atal Tinkering Labs with an aim to promote education in the field of science, technology, engineering
 and mathematics (STEM), space education, and space technology-related innovations for school
 students.

The Department of Space (DOS), Atal Innovation Mission and <u>NITI Aayog</u> will adopt 45 Atal Tinkering Labs in the first phase and then 55 others will be adopted by ISRO.

What is Atal Tinkering Labs?

Atal Tinkering Labs (ATLs) have been established at schools across India under the Atal Innovation Mission (AIM) of the NITI Ayog, with a vision to "cultivate one million children in India as neoteric innovators". The objective of the scheme is to "foster curiosity, creativity, and imagination in young minds" and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing, etc.

ATL is an activity conducted under the umbrella mission named 'Atal Innovation Mission' (AIM). AIM is the Indian Government's flagship program to foster a culture of entrepreneurship and innovation.

- AIM establishes ATLs in schools across the country with a vision to 'Cultivate one Million children in India as Neoteric Innovators'.
- The chief objective of establishing ATLs is to promote curiosity, imagination, and creativity in the minds of school-going children.
- Other goals of the scheme include inculcating in children a design mindset, adaptive learning, computational thinking, physical computing, etc.
- The philosophy behind ATLs is that prize awards and incentives are a great start to generate an aggressive wave of innovation and entrepreneurship in school-going children.

Features of Atal Tinkering Labs

ATL's are workspaces where children can realize their ideas through hands-on do-it-yourself mode and also acquire innovation skills.

• They get the chance to comprehend STEM (Science, Technology, Engineering, and Math) concepts.



- The labs contain educational kits and equipment on electronics, science, robotics, sensors, 3D printers, computers, and open-source microcontroller boards.
- The labs can also have other upgraded facilities such as video conferencing and meeting rooms.
- There would also be other activities such as national and regional level competitions, problem-solving workshops, exhibitions, designing and fabrication of products, lectures, and so on.
- The financial support for ATLs would be given by the AIM. Each school with an ATL will be given Rs.20 Lakh (includes a one-time Rs.10 Lakh for establishment + operational expenses of Rs.10 Lakh for a maximum of 5 years).

ATL Eligibility

ATL's would be set up by schools (having grades VI to X) that are managed by the government, local bodies, private trusts or societies, etc.

Frequently Asked Questions related to Atal Tinkering Labs (ATLs)

What are Atal Tinkering Labs?

Atal Tinkering Labs are workspaces where children can realize their ideas through hands-on do-it-yourself mode and also acquire innovation skills. They are set up in schools all over India by the Atal Innovation Mission.

Who started Atal Tinkering Labs?

ATL's are established by the Atal Innovation Mission, which is a scheme administered by the NITI Aayog.

What is Atal Innovation Mission?

Atal Innovation Mission (AIM) is the Indian Government's flagship program to foster a culture of entrepreneurship and innovation. The components of Atal Innovation Mission are given below:

- 1. Atal Tinkering Labs
- 2. Atal Incubation Centres
- 3. Atal New India Challenge
- 4. Mentor of Change Program
- 5. Atal Community Innovation Center
- 6. Atal Research & Innovation for Small Enterprises (ARISE)

What is Atal Incubation Centre?

Atal Incubation Centres (AICs) are set up in higher educational institutions, R&D institutions, corporates, or even by individuals. They are world-class incubation facilities that provide physical infrastructure in terms of capital equipment and operating facilities combined with mentoring support by experts and the industry required for start-ups.