Launch of CollabCAD in Atal Tinkering Labs

Why in News

Atal Innovation Mission, **NITI Aayog** and the **National Informatics Centre (NIC)** have **jointly** launched **CollabCAD in Atal Tinkering Labs (or ATL schools)** to provide students experience in creating and modifying 3D designs.

Key Points

- **CollabCAD** is a collaborative network enabled and desktop **CAD (Computer - Aided Design)** software system, which provides a total engineering solution from 2D drafting & detailing to 3D printing.
    - **3D printing** or additive manufacturing is a process of making three dimensional solid objects from a digital file.
    - 3D printing has been used to create car parts, smartphone cases, fashion accessories, medical equipment and artificial organs.
- **Developed By:** It is an initiative of National Informatics Centre (Ministry of Electronics and Information Technology), New Delhi, **Bhabha Atomic Research Centre** (Department of Atomic Energy), Navi Mumbai and Vikram Sarabhai Space Centre (Department of Space, ISRO), Thiruvananthapuram.
- **Rationale Behind Launch in ATL Schools:** To provide a great platform to students of Atal Tinkering Labs (ATLs) across the country to create and modify 3D designs with free flow of creativity and imagination.
- This software would also enable students to create data across the network and concurrently access the same design data for storage and visualization.

Atal Tinkering Labs

- **Atal Innovation Mission** has established Atal Tinkering Laboratories (ATLs) in schools across India. The objective of this 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.
    - Atal Innovation Mission (AIM) is **Government of India's flagship initiative** to promote a **culture of innovation and entrepreneurship in the country.**
    - **AIM's objective** is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee the **innovation ecosystem of the country.**
- ATL is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills. Young children get a chance to work with tools and equipment to understand the concepts of **STEM (Science, Technology, Engineering and Math).**
- AIM provides **grant-in-aid** that includes a one-time establishment cost of Rs. 10 lakh and operational expenses of Rs. 10 lakh for a maximum period of 5 years to each ATL.
- In light of the current situation (Covid-19), the ATL program has launched a **'Tinker from Home'** campaign to ensure that the children across the county have access to useful easy-to-learn online resources to keep themselves fruitfully occupied.

    AIM has also launched the **Game Development module** as part of the 'Tinker from Home' campaign. It is an online platform through which students can learn to create their own games and also share it with others. This platform envisages to make students transition from 'game players' to 'game makers'.

Source: PIB