The objective of Atal Tinkering Lab is to foster curiosity, creativity, and Imagination in young minds and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc. Young children will get a chance to work with tools and equipment to understand what, how and why aspects of STEM (Science, Technology, Engineering, and Math).

Tinkering means trying things out, to explore, to experiment, an attempt to improve something. Tinkering has been an integral part of human evolution since beginning.

Benefits of Tinkering

- Promotes a 'Growth Mindset'
- Develops character and purpose
- Enhances critical thinking and problem-solving skills
- Making is a powerful force for Inclusion

Atal tinkering laboratories were established in schools under the initiative of Atal innovation Mission of NITI AYOG, Govt of India which aims to promote novelty and scientific temperament among the young learners. At the school level, AIM is setting up state of the art Atal Tinkering Labs (ATL) in schools across all districts across the country. Atal Tinkering Labs are dedicated work spaces where students (Class 6 to Class 12) learn innovation skills and develop ideas that will go on to transform India.

DAV Ashok Vihar Ph-4

MAKERNAUTS

"We make because we can."

From Principal's Desk

Innovation has been and will continue to be the key to improving the world ***- Bill Gates***

Creativity involves birth of ideas that did not previously exist it involves thought processes that can be sustained by creative thinking techniques. So let us open our hearts and minds and empower the children of today to create the world of tomorrow

From Chairman's Desk

The future depends on what we do today ***- Mahatma Gandhi***

Children demonstrate an amazing ability to adapt very quickly to stimuli in the environment. They flourish in the environment which supports them as they grow and learn much of what they imbibe from us & honestly it is clear that the architecture of the future is really in our circle of influence today.

DAV Public School Ashok Vihar Ph-IV inaugurated the "Atal Tinkering Lab" on 19th April 2018, under the Atal Innovation Mission by Niti Ayog, Government of India. The lab was declared open by Dr. Ramanathan Ramanan, the Mission Director, Atal Innovation Mission. He encouraged the students to dream & believe in their dreams and work hard with passion to fulfil their dreams.

Panel discussion was held between students and Dr. Ramanathan Ramanan to tinker more and work hard with dedication.

Principal Mrs Kusum Bhardwaj in her welcome expressed her happiness in setting ATL to inculcate scientific temperament among students. Dr NK Uberoi congratulated everyone associated with the school and looked forward to more of such contributions by the school towards the Welfare of the students.

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SESSION 2018-2019

Tinker Expo 2018

Luminaries from the field of education and science presided over the inauguration Ceremony of Tinker Expo. Several students from different schools were invited to the multi-disciplinary exhibition for enhancement of scientific temperament.

Tinker Expo was aimed at encouraging students to use 'ATAL TINKERING LABS' for innovative thinking, learning to make innovations.

Workshop on Robotics by ROBOMAX

Various workshops have been conducted in our school. Workshop which was conducted by ROBOMAX on 7th December 2018 at DAV ASHOK VIHAR for students of class 6 to 9. Students interacted with the Trainer and few projects developed by students in school for various purposes during this workshop.

Projects Developed

In a bid to make its impact on the world with a vision to 'cultivate 1 million children in India as neoteric innovators', the think tank of India, NITI Aayog, has established a network of 'Atal Tinkering Labs' (ATL) under the Atal Innovation Mission (AIM) with the objective to endorse STEM system of education, by cultivating curiosity, creativity, and imagination in the young India. It aims at inculcating skills such as adaptive learning, computational thinking, physical computing, and rapid calculations, among many others.

Rocket by SDRO

Workshop was given by SDRO trainers for students to see how the very face-dream of field of Rocket Science works. They introduced students with the art of launching of Satellites using Hydro Rocket & Ethanol Based Rocket.

They also conducted a competition for the participating students.

Few of the projects developed are:-

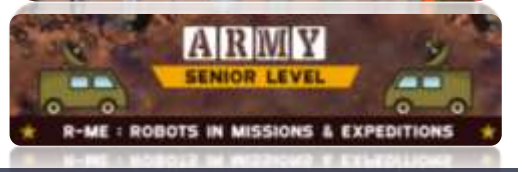
Solar Tree house	Obstacle Avoidance	Soccer Robot
Auto solar seed dispensing tractor	Claw Robot	Laser Security system
Staircase for disabled	Security door lock	Sumo Robot
Gesture Controlled Wheelchiar	Maze Solver	Hydrauic Crane

Thanks to our principal madam Mrs. Kusum Bhardwaj and our in charges Ms. Harpreet Kaur, Ms Sangeeta Sardana & Ms Lavina Arora for giving an opportunity to showcase their skills.

IRC Season 9

The event witnessed many children with excitement & courage to win the IRC School League North Delhi Qualifier held at D.A.V. Model School, Pitam Pura on 15th November 2018. Team "RoboMonks Senior" won under Senior Level in the competition against 29 teams at national level on 15th December at Thayagraj Stadium, Delhi.

Harsh, Vinamra (11-A) & Anurag, Sarthak (12-A)



avishkaar
Make! We Can

Avishkaar Makeathon

Total of 350 projects were selected in ideate stage all over the country and in the finale 70 projects were selected out of which 4 Projects were from D.A.V. Public School, Ashok Vihar , Ph-IV . Projects were to help the society and rectify the current solutions which are being used.

Checkmates - Anurag & Tanya
RoboCropping– Harsh, Mudit & Tarun
Exploronauts – Vinamra & Mili
Contagious Intellegence – Adwiteek, Ayush, Samarth, & Parth.

TinkerFest (RUFG)

Tinker Fest "Robot Unknown Football Game (R.U.F.G.) was organized at D.A.V. Public School, Ashok Vihar, Ph-IV, Delhi. Participants from different schools exhibited their talent enthusiastically D.A.V. Shalimar Bagh came 1st followed by **D.A.V. Public School, Ashok Vihar, Ph-IV (Shivam & Anurag 12-A)** and Maharaja Agarsen Pubic School, Ashok Vihar. Principal Mrs. Kusum Bhardwaj congratulated the winners and appreciated the team work and dedication of all the participants.

Student-Preneur

Entrepreneurship allows students to learn more than their chosen field of study, creates an interdisciplinary environment to work and develop in. **Nikhil & Ridhima** from Junior wing, **Anurag & Tanya** from Senior wing who are truly a trailblazer of our school based on participation, team leadership qualities, innovations developed and supported school activities including social media.

AWIM Regional Olympics

AWIM Regional Olympics For Delhi Zone 01 & NCR on 23rd Oct 2018 and Delhi Zone02 & Gurgaon on 24th Oct 2018 at MarutiSuzuki Training. Students of class 5th created Skimmer boat & students of class 6th created Jet Toy (Balloon powered car). They received the best Presentation & best Disciplined team among 44 schools in Delhi NCR.

WHEN YOU SET YOUR MIND TO ACHIEVE SOMETHING, YOU MUST ALLOW YOURSELF THE OPPORTUNITY TO GET IT DONE

Subject/School	Competition Name	Venue	Competition date	No of Participant	Position Achieved if any
Tinker Fest 2018	RUFG 2018	School Premises	24 August 2018	2 students	2nd Position **(Shivam & Anurag 12-A)**
DL DAV Pitampura	CrossRoads 2018	DL DAV Pitampura	31 August 2018	2 students	2nd Position (**Shivam & Anurag 12-A**)
SAE AWIM	Regional Olympics	Gurgaon	06 October 2018	8 students	Student participating in Jet toy of **class 6th** were **Akash, Daksh, Khushhaal & Parth** received best Presentation Students participating in Skimmer of **class 5th** were **Divyansh, Rehan, Riddhima & Yashasvee** best Disciplined Team.
Avishkaar	IRC season 9	DLDAV Pitampura	15 November 2018	3 team 4 participants each team	1st position in north delhi **(Harsh & Vinamra - 11A & Anurag & Sarthak 12A)**
Avishkaar	Makeathon 2018	Thyagraj	15 December 2018	15 teams	Total of 350 projects were selected in ideate stage all over the country and in the finale 70 projects were selected out of which 4 Projects were from D.A.V. Public School, Ashok Vihar , Ph-IV . Projects were to help the society and rectify the current solutions which are being used. **Checkmates - Anurag & Tanya** **RoboCropping– Harsh, Mudit & Tarun** **Exploronauts – Vinamra & Mili** **Contagious Intellegence – Adwiteek, Ayush, Samarth, & Parth.**
Avishkaar	IRC season 9	Thyagraj	15 December 2018	4 students	competed in Nationals finals at Thyagraj Stadium and secured 13th position all over India **(Harsh & Vinamra - 11A & Anurag & Sarthak 12A)**

Teacher's Column on Future Endeavors

By Ms. Tripti Verma (ATL Incharge)

& Mr. Rohit Puri (ATL Coordinator).

Setting up of ATL in school premises will provide needed boost to Innovation ecosystem. Students keen on learning new technology have plethora of innovative ideas in their minds to help the community at different levels. To initiate the same, students are planning to work on the prototypes designed by them. They are keen to develop following prototypes in working models which can be utilized within school premises to test their workability as well as to serve the community.

Home Automation- The concept used in prototype will be re-designed to work on a house to provide the cheap and best way to utilize IOT.

Vending Machine- we can install them in our school to showcase the skills of students which will allow them to earn knowledge on the concepts of dispensing articles from the machine.

Smart Street Light- This will work on the concept of saving electricity. Which will be solar powered.

Anurag Yadav & Prajwal(12-A)
We have also started demonstrating our projects in various competitions and won prizes. To take the innovation journey of the school to the next level, our school has planned to upgrade the Lab with more tools, equipment and facilities.

Vinamra & Harsh (11-A)
ATLs will be hubs of innovation where young minds like us will accelerate our ideas to solve unique local problems. Atal Tinkering Labs are dedicated work spaces where students learn innovation skills and develop ideas that will go on to transform India.

Nikhil Sharma (7-D)
ATL is a workspace where young minds like us can give shape to their ideas through hands-on do-it-yourself mode, and learn innovation skills. We got a chance to work with tools and equipment to understand the concepts of STEM (Science, Technology, Engineering, and Math).

Ridhima (5-A)
The lab is well-equipped with different tools, Electronic items, Sensors, 3D pen, 3D printers, IOT devices and high-end computers. We get an opportunity to have a hand full of practical experiences about the concerned subjects and can implement our thoughts and ideas into a project.

Tanya (9-A)
The lab is a brilliant way to bring the do-it-yourself culture to the forefront, encourage and motivate students to become solution providers and get engaged in self-learning that will not only lead to the development of higher order thinking skills, but may eventually lead to discoveries, innovations and inventions.

Sarthak & Aman (12-A)
We loved the STEM Kits present in our school lab by Avishkaar Box. The lab activities are designed to spur the spark of creativity, and go beyond regular curriculum and textbook learning.