KOTHARI INTERNATIONAL SCHOOL

SESSION 2019-2020

TINKERFEST WORKSHOP

DATE- 20 JULY,2019

VENUE- JAYPEE PUBLIC SCHOOL

RESOURCE PERSONS -**STEM ROBO TEAM**

The workshop started with the meaning of tinkering and on the importance of ATL in today's school education. The main objective of this workshop was to connect theoretical knowledge to the real world with the use of technology. ATL gives an environment to explore, to identify the problem and create solutions beyond text books. Through various projects using ATL components, children will become innovators.

Let innovators start young and tinkering will stimulate young minds with the 21st century skills- critical thinking, problem solving, creativity and imagination and collaboration and team work.

Day one started off with a brief introduction to robotics and its uses in this modern period. Even though students were well aware of Arduino and other basics of robotics, still, the knowledge provided by the STEM Robo team made students and teachers even more cognizant on the topic.

After the basics, Students started interfacing sensors, IR sensor, Ultrasonic sensor were some of the hardware we worked on. Side by side they learned to code on the Arduino IDE. They were well aware of this topic so this part was kind of nugatory for them, but meanwhile, they made some higher-level coding using the same sensors just to use the time productively. Still, this workshop refreshed their basics.

3-D designing was the topic took up for the second day. Difference between 2D and 3D Printing was discussed. This was a new topic for us as students were introduced to 3-D designing in the past few months. Students sat with Deepanshi ma'am, the day before and assimilated the concept of 3-D designing on TinkerCAD (a designing website). This helped them to complete the two given tasks - design a 3-D Tinkerfest trophy for the Tinkerfest and a cuboid box with a lid, on the basis of which STEM robo team were going to analyze the winner. It was not easy to do this all in 50 minutes, but students took the bull by its horns and became triumphant. Students of Kothari International School stood first, followed by DPS Gautam Budh Nagar who stood second in the competition.