

## Mentor, Kolkata: Mrs. Sumbul Ahmad, SGJ School

CONDUCTED STEM AWARENESS PROGRAMME... Arranged and Escorted the Student to The American Consulate to watch the Documentary "BIG DREAM" by KELLY COX

**Big Dream follows the intimate stories of seven young women who are breaking barriers and overcoming personal challenges to follow their passion in science, math, computing & engineering (STEM).**



**Kelly Cox Director**

**Group of Science Students from SGJ School**

It was on 15<sup>th</sup> February when our Mentor **Mrs. Sumbul Ahmad**, made some sincere efforts to make arrangements for we girls to attend the screening of this documentary, so that we could get **inspiration** and **motivation** and at the same time develop our **keenness** to pursue our studies further in **STEM education**.

We would also like to thank our Coordinator Mrs. Samina Khan and our Vice Principal Mrs. Sukaina Ali for allowing us to witness this **enriching Event**.

Girls from many other schools formed a part of this show. The students were shown a documentary film '**BIG DREAM**' that was directed by Kelly Cox. The film acted as the best remedy to overcome the ailment called '**fear**'. Fear to try, the fear of being judged, fear to face the world as a failure, all were erased when students were shown that especially filmed video for a wonderful cause. It had some really powerful ladies as protagonists. It conveyed how failure is not the end; instead it is just the beginning of a successful journey ahead.

The film triggered a great deal of confidence that was somewhere lost within us. It helped us explore our true abilities. We had an interactive session with **Kelly Cox (Director)** and **Jay Treloar (Director American Center, Kolkata)**.



### **Interactive session**

It was quite a **learning experience** as amongst the girls we had a young director from Loreto School Bowbazar who used Technology to direct films in very low budget. The session not only broadened our **visions** but also motivated us to **overcome** our **hindrances** to become **victorious** and follow our **dreams passionately**.

Later, after the program came to an end, the students were handed food packets. We as students were really blessed to attend a program that was so motivating and especially designed for **girls** from **minority sections** to dominate in the fields of **Science, Technology, Engineering** and **Mathematics**. A big thanks to the organizers, who helped us realize that we are not models to stay back at home and decorate the same. We are the leaders that can make this world a better place to live in. It was one really wonderful experience we had shared.

**Report by,**

**Tanzila Naz and Munshi Saba Khaton**

**(On behalf of the entire group)**

**Mentor, Kolkata: Mrs. Sumbul Ahmad, AMU**

**Mentor to Students of SGJ School, Kolkata**

**Robotics** is an interdisciplinary branch of engineering and science that includes mechanical engineering, electronics engineering, computer science, and others (**STEM Education**).

**World is changing very fast. Once upon a time there was a PC revolution, Then Mobile Revolution now in future Robotics will be part of our lives.**

With this **vision** our **Mentor Mrs. Sumbul Ahmad** has been striving hard to create an **awareness** of **STEM Education** and the Role of Robotics in future among the **young girls** and **boys** and their **parents** of the **Minority Section** of the **Society**.

One of the **Efforts** to create **awareness** of **STEM Education** and to draw **attention** towards **Robotics Learning** was to **organize** an **exhibition** for such **students** and **parents**.

A Robotics exhibition was held in the **School Auditorium** on 23<sup>rd</sup> June, 2018 for which our **Mentor** teacher **Mrs. Sumbul Ahmad** picked up a group of excited students who were willing to devote some time after school for the activity.



In those sessions we learned how to connect circuits to its mechanical parts. These models were then connected to the computer and then programmed using Arduino application. These models were a miniature of the real life mechanical system used in everyday life. For example.

- 1. The Counter Mechanism model used in Shopping Malls to sense the approaching footstep and opens the door.**
- 2. A crane was built using pulley system to lift heavy weight in construction sites.**
- 3. The switch railway gate was programmed to sense the approaching train and opens the gate and closes it when it passes through it.**





We are extremely thankful to Mrs. Sumbul Ahmad who used the **fellowship amount** judiciously to **sponsor** the **circuits** and **components** for **building** these **miniature models**.

On the we showed a presentation of Robotics playing in the **backdrop** and students demonstrated the working models which essentially used **Physics** and **Mathematical** principles integrated with **Computer programming**. It showed the vast opportunities available to students who pursue Robotics as a subject especially in **STEM Education**. It successfully motivated the students at large. **Robotics** makes learning **Science** and **Maths** fun, with **hands-on** activity instead of **theoretical learning**.



**With this Exhibition we could successfully inspire a lot of students at large to Motivated them to pursue Stem Education as their career.**

We would also like to thank our Coordinator Mrs. Samina Khan and our Vice Principal Mrs. Sukaina Ali for allowing us to put up this **Enriching Event**.

**Report by,**

**Nabiha Mohiuddin and Ayesha Firdous (On behalf of the entire group)**

**Edited by Mrs. Sumbul Ahmad**