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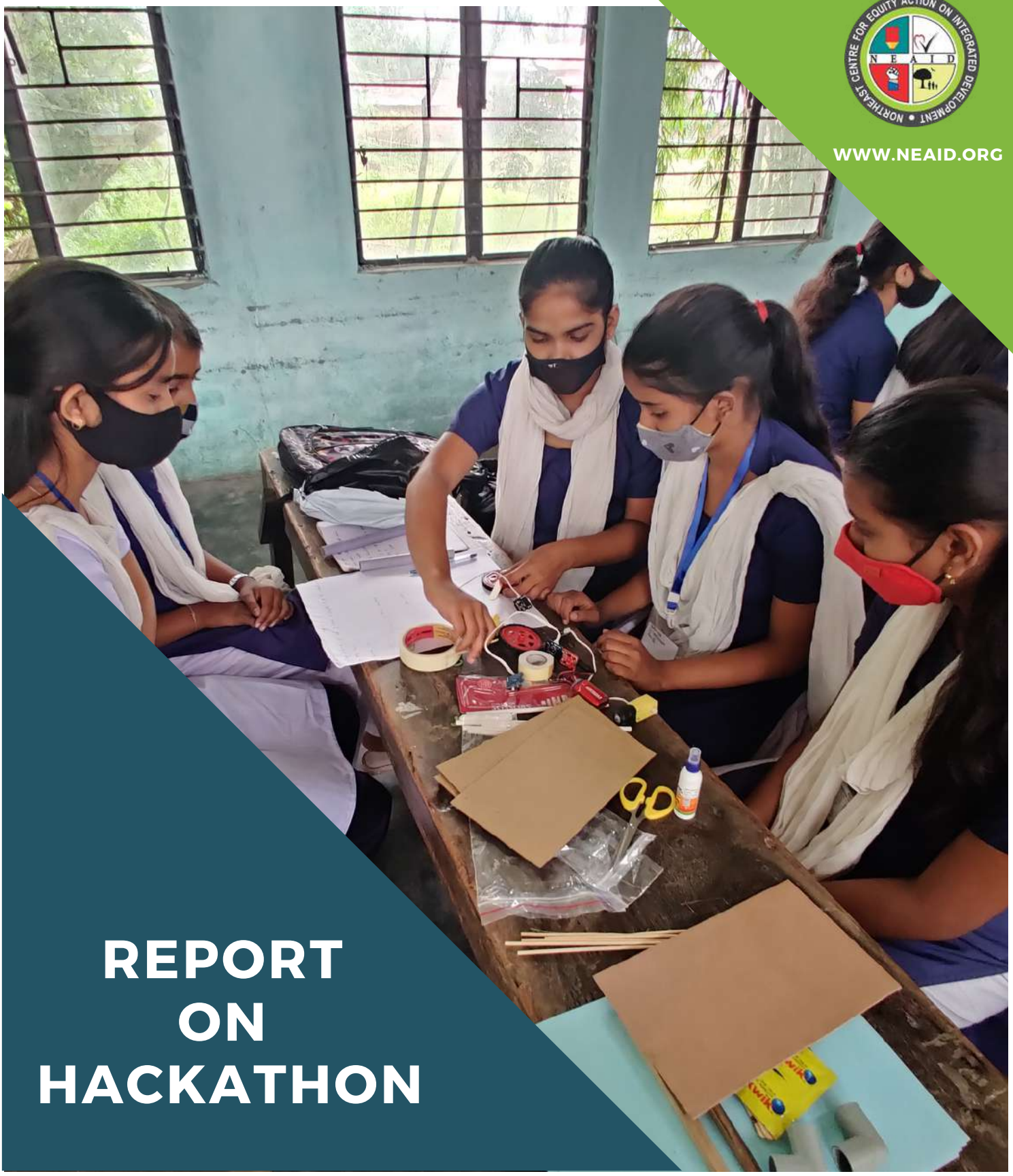


REPORT ON HACKATHON

Northeast Centre for Equity Action on Integrated Development (NEAID)

IBM

QUEST ALLIANCE

STEM FOR GIRLS

ABOUT STEM FOR GIRLS PROGRAM

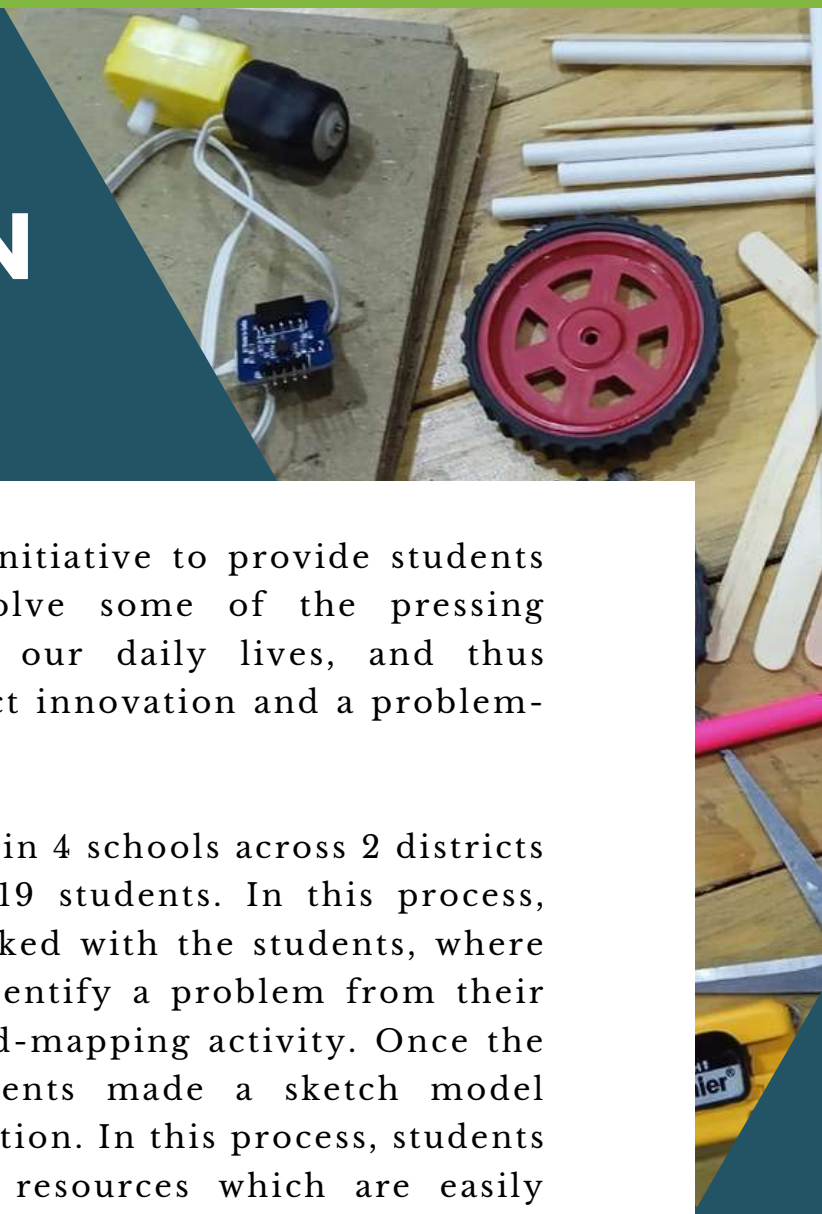
STEM for Girls is an overall development program intended to develop 21st-century skills (life & career), digital literacy, coding, and gender sensitivity in the students from 8th to 10th standards in the Government Secondary Schools, especially for the girls.

Through this program, it is tried to build and enhance a transforming learning ecosystem with the help of certain skills. Here the emphasis is given on the 21st-century skills like knowing about self, communication, relationship building, problem-solving skills and the skills for life, preparation for a career, digital fluency, and self-employment. A planned responsible educational teaching process is introduced to work on the above-mentioned skills in the secondary schools under STEM for Girls.

The program introduces a systematic quality-driven transformation advocating technological and professional or vocational education in partnership with the government and volunteer organisations through which the lives can be changed overcoming the limitations and gaps.
So, such a system is required where the girls would be encouraged to study further and get to know about the multiple possibilities available about the numerous careers.

a overview on

HACKATHON DAY



Hackathon is a nationwide initiative to provide students with an opportunity to solve some of the pressing problems that we face in our daily lives, and thus inculcate a culture of product innovation and a problem-solving mindset.

NEAID conducted hackathon in 4 schools across 2 districts of Assam reaching out to 219 students. In this process, Akikaran fellows closely worked with the students, where they were given a task to identify a problem from their surroundings through a mind-mapping activity. Once the problem is identified, students made a sketch model working on the probable solution. In this process, students had identified eco-friendly resources which are easily available in their surroundings to make the prototype cost-effective.

In the "Do-Stage" (Hackathon Day), students work on a prototype using eco-friendly resources which are easily available in their surroundings to make a cost-effective model. Akikaran fellows also help the students by providing tool kits to each group to make prototypes of their solutions. During the Hackathon, students made prototypes such as bicycles, washing machines, and water sedimentation filter models which they presented to the larger group. In the presentation students shared how they identified their problem statement, how they worked in the sketch model, what resources they identified from the surroundings and how they came up with a solution to solve the problem statement.

REACH (ONLINE & IN-PERSON)

CASE STUDY

Pritirekha, Karishmita, Chimpi, Barasha, Ringki and Himashri are classmates, studying in grade 9 of Sarthebari Girls High School, Barpeta. They have to travel around 8-10 kms everyday from their homes to school, mostly walking, due to which sometimes they miss their classes.

As a team, they have made a prototype of a bicycle using wheels, cardboards, straws, pop-ups sticks, chopsticks, rubber bands, tape, and glue which will make their life easy. Isn't this interesting and inspiring?

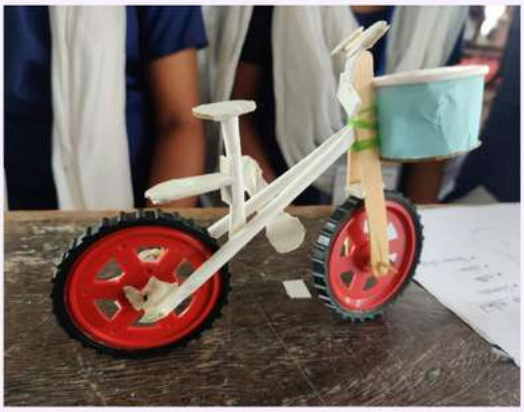
A group of students from Sarthebari Girls High school had identified a problem of lack of clean water in their village since the groundwater contains Iron. This problem is a burning concern in their entire community, therefore they have decided to work on it. In their sketch process, they made a sedimentation water filter to extract iron particles from water. In the do-stage (hackathon day) students collectively came up with a prototype model to make a water sedimentation filter. They made the use of locally available resources and a tool kit provided by Akikaran Fellows to make a model which they presented together to other students and teachers.

STUDENTS' TESTIMONIALS

I feel really happy today as I got a new and exciting opportunity in our school. I always wonder how my mother feels washing lots of clothes at a time. She is going through lower back pain. I am happy as NEAID Hackathon program had given me an opportunity to identify a problem which has always been bothering me. I had discussed the problem of my mother with my group and we had come up with an idea to make a washing machine. During the hackathon day, our team made a prototype of a washing machine with the the tool kit and guidance from our baideo (Akikaran fellow).

This experience had really inspired me to work on the permanent solution. I also request all teachers to keep us encouraging with new things and ideas.

- Dipamoni Kalita (9th Grade)
Champaknagar Girls High School



STEM
FOR
GIRLS