The period from April 2020 to March 2021, presented a trying time due to the pandemic. With schools closed and students not having facilities to engage in on-line classes, the formal learning process almost came to a grinding halt. To alleviate this situation, somewhere from the middle of the academic year when the first wave showed signs of relief, REWARD Teachers conducted in-person classes in the streets where they live to all the students irrespective of the schools with due care to pandemic protocols. In addition, our teachers utilised this time in broadening and deepening their academic knowledge base. During this period the teachers were teamed in eight groups based on their proximity. One teacher in each group functioned as the spokesperson. Throughout the period the teachers discussed within their groups for clarifying their doubts in their self-study activities. They also learnt to utilize on-line teaching-learning tools. Though training the teachers with novel on line teaching tools is essential and has been carried out, the Trust is sensitive to the fact that on the ground, hardly any rural child has access to a smart phone.

A month-wise brief summary of their continued engagement with academics is presented in this report. In these math activities are done by President V. Sridhar, Physics and Chemistry activities are by Dr. S. Kalavathi, English and Social activities by Treasurer Ananthi Baskar and biology by Megala Rajanbabu.

April-2020

President V. Sridhar initiated Whatsapp based classes. Teachers were given exercises in the concept of Number Line and introduced to drawing of icosahedron. Individual teachers were called over the phone to examine their understanding. Treasurer Ananthi gave a written assignment with the title ‘What will you do if you were given the authority to frame the policy for fiscal measures?’. This saw interesting response from the teachers as they wrote and sent their responses using smart phone

May-2020

A discussion with individual teachers over the phone on Arithmetic and geometric series followed by problems on rolling of dice, determining the area of a right triangle and obtaining the radius of a semi-circle were the math activities.

Introductory level problems in kinematics were given as part of physics activity.

The plight of migrant labourers was brought to focus and the teachers were asked to write on why they chose to walk to their native places despite the staggering expenditure for food during their travel and what the response was from their employers and their native State.

June-2020

The as yet unsolved Collatz conjecture was introduced as a part of the math activity to the teachers and they were asked to try it out for different numbers. In geometry the teachers were introduced to the concept of nine-point circle. To aid understanding of the filling of electrons in orbits teachers were also introduced to quantum numbers.
Along with Kalavathi, a student volunteer Krishnaveni (who was an erstwhile student of Vengampakkam school and done her M.Sc in Chemistry) made presentations using audio and video modes on Periodic classification of elements. It is heartening to see a product of the REWARD Trust activity grown up to contribute.

For English language, the teachers were engaged on homonyms and homophones.

Megala Rajan Babu, Biology resource person asked the teachers to take up self-study in Biology lessons - 5th to 10th standard science book for Term-I and conducted test.

July-2020

Giving three information will be sufficient to draw a triangle. This aspect formed the part of math activity and the teachers were asked to find out the set of all such independent triplets. In addition, they were engaged in proving the theorem on cyclic quadrilateral and also in finding the 5th and 6th side of a hexagon.

Self-study in Biology lessons from 5th to 10th standard science Term II books was assigned and a test was conducted.

A few video and audio lectures in Economics explaining the basic concepts were passed on. It was followed by a test.

In addition, the teachers were asked to find out possibilities of conducting classes for the children in their neighbourhood with COVID protocols

August – 2020

Felicity of teachers in the application of BODMAS rule formed part of the math activity. Classes on Isotopes and radio activity were presented using audio and video format.

Poems of William Wordsworth, Rudyard Kipling, William Shakespeare, Walt Whitman, John Donne and John Keats were taken up and the teachers were evaluated via Phone call.

A typical chart work by teachers

Attractive charts awaiting reopening of schools

September- 2020

The teachers were assigned self-study in Electrostatics and evaluated their understanding through individual phone calls.
In biology, assignments and a viva on the following topics were considered through Google meet & conference calls:
Killer diseases, Environmental pollution by human activities, Role of microbes in the field of Medicine, Human Biological Clock, Endangered Mammals, Human Endocrine System, Cell Organelles and Pioneers in Plant Taxonomy & their contribution.

**October -2020**

Chemical bonding, a topic covered in the middle, high and higher secondary level were taken up in Chemistry. The topic was handled in two parts. PowerPoint presentations sent via whatsapp, followed by doubt clearing sessions kept the activity lively.

Exercises on simple, compound and complex sentence were given and evaluated via phone call. A film review activity on Tamil, Malayalam and English movies lightened the atmosphere and enabled creativity. This was evaluated via Google meet.

Testing the teaching methodology in biology with visual aids engaged the teachers in the following topics through google meets. Topics were selected by the teachers based on their own interest: Human Brain, Kidney, Liver, digestive system (physiology), respiratory system (physiology), Human cell types in addition Vitamins and Flowers

**November-2020**

Chemical bonding- part II was continued. The teachers were interviewed at the end.

**December-2020**

Sridhar conducted an in-person class on geometry. Teachers were called to Irumbulichery in batches.

A few selected lessons from English and Social Science from class 6th to 9th were assigned and the teachers were evaluated via Google meet.

**January-2021**

Sridhar conducted in person math class – discussion on class IX math

In Physics a revision on the topic of Measurements was done and evaluation was carried out.

**February-2021**

On Science Day Megala organized an in-person presentation of Simple Experiments in Biology by teachers at Irumbulichery.

1. Testing the release of carbon di oxide during seed germination & human respiration and constructing working model for water pollution.
2. Seed germination in various dicot & monocot plant seeds
3. Osmosis experiments by constructing potato, carrot, and kohl rabi osmoscopes and demonstration of Oxygen release during photosynthesis of Hydrilla plants.
4. Working models of Human internal organs.
5. Spooling of DNA from Human blood sample and plant seeds and fruits.
6. Starch iodine test on various food sources, fruits & vegetables.
7. Celebration of Ecofriendly Holy by preparing natural dry and wet colors.
8. Microscopic slide preparations of onion peelings and leaf stomata.
March-2021
Appreciation of small quantities – understanding usage of nano, femto, atto and so on...
In physics Self-study on current electricity was assigned and a test on problem solving was conducted
Thus a continued interaction during the pandemic kept the teachers knowledge base robust.

Bio Experiments

Demonstration of Oxygen release during photosynthesis of Hydrilla plants.
Starch Iodine test on various food sources, fruits & vegetables

Spooling of DNA from Human blood sample and plant seeds and fruits.
Classes closer home – a few typical presentations

Teacher Kalyani conducting classes near her house

Learning the COVID norms  No walls against learning…
The will and the way...

Teacher Neelavathi conducting classes on her terrace
Teacher Poongothai engaging the children near her house