

STEM Integrated Program

Introduction

The STEM integrated program seeks to link content taught in regular classroom in Science Maths and Social Studies to a weekly activity based session which aims at development of conceptual understanding, applying that understanding, analyzing deviations and failures as well as compliances. This is in line with Bloom's Taxonomy (the higher order thinking). This program is aimed at primary schooling where it is believed the conceptual understanding starts. The Program also aims at developing independence and creativity of thought, collaboration and team working – some of the 21st century skills.

Mechanics

The program is run on a weekly basis with an 80 minute(two periods taken together) class every week for each section in class 3, 4 and 5

The school will provide their lesson pacing plan so that activities are mostly synchronized with what is learnt in class and the STEM class reinforces and develops the learning to higher levels.

The program will follow all the rigor of teaching with lesson plans, assessment based on rubrics shared in advance and analysis of the rubrics from the point of view of the student and the program content itself.

Each class will be pre assessed for dominant learning style and students be divided into groups of 4 each with similar learning styles. Each class will have 3 mentors and therefore each mentor will have 3 groups to mentor.

We suggest one of the mentors be a school teacher who would otherwise have been taking the class. This will help understanding of the teachers, feedback from the teachers to us and continuous improvement in the program. We will need a 90 minute session with teachers each week to share the lesson plan, activities and models etc

We will thus provide 2 mentors in each class and a senior person as an observer who is intimately connected with the development and design of the program (either me or a senior person)

Assessments will be part of the program and all assessment results will be analyzed for impact, for student understanding etc so that the program, teaching style and pedagogy can be improved.

Time lines

To start in the April session, we would need to start development immediately. The program would be developed term wise and based on the pacing data provided by you.

We plan to start the development process as soon as we reach agreement including hiring the mentors