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NOTE TO PARENTS



Coding and computational thinking are set to become core life skills for the future just as literacy and numeracy are today. Most advanced countries have included coding as part of the core curriculum and NEP 2020 clearly sets out the roadmap for the Indian education system as well.

The Coding and Computational Skills (CCS) program follows a unique USE-THINK-BUILD (UTB) pedagogical approach.



USE

The first step in the UTB approach is to take the students through an immersive experience that introduces them to their project. Students USE apps, games, websites, visualizations and engage with audio-visual content. This helps them obtain the perspective and user experience of what they would be creating through their project.



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The second step in the UTB approach is to make students THINK. Through independent and group activities and routines, students learn to understand the computational thinking and logic that is required to build their project. This deeper understanding helps them develop skills like observation, visualisation, design, critical thinking, problem solving, and decision making.



BUILD

The third and final step in the UTB approach is to make students BUILD their projects - puzzles, artwork, publication, animations, apps, games or websites. Students use age-appropriate, easy to use software and applications to bring their ideas to life. The ability to build, code and showcase their projects is essential to nurturing their creativity and express their ideas.

The LEAD CCS curriculum and progression is benchmarked against international standards and there is a clear skill progression through each grade, making the LEAD CCS program one of the most comprehensive programs available to schools and parents.



NOTE TO PARENTS

Your child has an exciting year of learning ahead! While learning to code, children need to develop computational thinking. To help them acquire the skills without being discouraged by the technicality of the subject, we have introduced Scratch in Class 4. Since Scratch is a block-based programming language, they will find it interesting, entertaining and thus be comfortable with coding from the beginning.

Given below are some highlights of their learning path in CCS in this school year. By the end of this year, your child will be able to:



This curriculum will not only improve the coding skills of children, but will also make them good problem-solvers, decision makers, and critical thinkers by developing their analytical and higher-order thinking.



HOW TO USE THE BOOK

The book is an integral part of the Coding and Computational Skills (CCS) program. Each grade has a CCS book that covers the important skills for learners. Specific learning outcomes for each unit can be found at the starting of each unit. There are various activities that build computational thinking and cover the requisite skills to be learned through that unit.

Key sections of this book:

Learning Outcomes list the expected measurable learning outcomes achieved by the student that will be covered through the unit.	Learning Outcomes • Arrange data in an organised way. • Compare a table and a spreadsheet. • Insert and delete data in rows and columns. • Apply formatting to a spreadsheet.
Introduction gives a brief of the skills and projects that the students are going to cover in the unit.	Introduction Creating a Family Health Report with LibreOffice Calc In this unit, we will explore how spreadsheets help us to organise data. We will also learn to use the features of a spreadsheet through different activities.
Observations table is used to list the recordings from the videos/apps reviewed in class.	What did you see in the video? Observations
Skill Time contains the Use-Think-Build approach to enable learning. It contains activities that are to be done in the class.	Skill Time 1 Second Sec
Activity is primarily for building skills through which students can identify the extent to which they have attained the learning outcomes of the unit.	Activity 1. Relation Age (in years) 1.1 Collect data on the ages of your family members and arrange it in the given formats. 1. 2. 3. 4. 5. 9. 9. 9. 9.
Did You Know contains interesting facts related to the topic covered.	Did You Know? Data is a collection of facts such as numbers, words, observations, or descriptions of things.



HOW TO USE THE BOOK

Quick Tips give additional information about the concept.	Quick Tips: You can also use the options in the Format menu to apply text formatting.
Diary Entry is used to keep a check on the skills that students have learned through the Skill Time.	Diary Entry I Can Image: Comparison of the comparison of t
QR Codes are available at various points in the workbook to enhance learning through content and enable rewards (badges and certificates) on completing specific levels.	Image: Scan me For Videos For Certificates and Badges
Each unit has a Project at the end where project guidelines and ideas are given. The project incorporates all the learning from the unit that students can implement.	Create a family health report card. Add the collected data to the spreadsheet that you have created, and do the following tasks: 1. Add Name' as the first column. 2. Add the following columns on the right side: Energy-giving food, Body-building food, Protective food, Observation.
Practice Questions are primarily for home practice and for students to identify the extent to which they have attained the learning outcomes of the unit.	Practice Questions Expenditure of a spreadsheet given below. 1. Label the components of a spreadsheet given below. Image: A spread s



ANNUAL LEARNING PLAN

PART 1	Unit Name	USE	THINK	BUILD	Unit No.
	Health Report Card	Spreadsheet	Observation Problem-Solving Decomposition	Create a family health report using a spreadsheet.	1
	Habit Stacking	Spreadsheet	Analysing Visualisation Creativity Statistical Analysis	Create your habit stack using a spreadsheet.	2
	Alice in Wonderland	Scratch	Coding Algorithmic Thinking Critical Thinking Mathematical Thinking	Create a story 'Alice in Wonderland' with Scratch.	3
	Superhero Maze Game	Scratch	Coding Computational Thinking	Create a superhero maze game using Scratch	4

PART 2 Unit Name	USE	THINK	BUILD	Unit No.

Milk: A White Revolution	Internet	Researching Multimedia Decomposition	Create a well- researched presentation using Internet.	5
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My Experiences	Internet, Google Blogger	Creativity Logical Thinking Critical Thinking Multimedia Writing Skill	Create a blog with Google Blogger.	6
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Course of Life	HTML	Coding Logical Thinking Critical Thinking Multimedia	Create a personal portfolio web page using HTML.	7
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The CCS book contains important skills that students learn in class. Each unit comprises of a few skill times and a final project. A Skill Time includes many plugged and unplugged activities. Students should complete the activities in the book after seeing a video or demonstration by the teacher in class as per the LEAD learning plan.

Students should read the CCS book at home for revising the concepts taught at school. They can scan the QR codes at home to watch the videos, read the documents, and download the badges and certificates. Students should also refer to it while preparing for assessments.