

Coding-Why it is Essential for 21st Century School Education

What is Coding?

Gone are the days when we used to talk challenges for human beings posed by computer science. Nowadays life is almost incomplete without computer, android phone or SOs. Google has entered into our life. They are counting our pulse and breathing.

Computer, computer programming, coding, artificial intelligence, different apps makes our life as easy as complex. Computer programming is essential ability for 21st century learners to be developed for excelling in personal and professional life. Coding opens up new horizon for 21st century students.

Learning Potential (Australian Govt) describes coding in a simple language. It defines as “coding is lists of step-by-step instructions that get computers have to do what you want them to do. Coding makes it possible for us to create computer software, games, apps and websites.”

Hacker.io defines coding as feeding our commands in the computer in a language the computer understands, so that the computer can carry out the said command, and perform the task.

Coding is known as computer programming. Code instructs a computer to work in a certain manner. We can use the skill of coding for developing different apps, developing different games processing data, developing websites etc.

Learning coding is like teaching language to a learner. Here learner is machines. A coder tells machines “What to do, When to do and How to do”. Coding requires the mastery of problem solving skills as computational thinking. Usually coder breaks larger tasks into small tasks in a sequential manner. Coder diagnoses errors to bring new approaches and commands.

Coding

Why does it matter in schools?

Skill development is comprehensive and continuous life long process to survive and to grow in this VUCA world. We can observe “the probability and possibility” but can’t fix the result. Computer Science professionals, engineering professionals, software developers and professionals, cyber security professionals and experts, product developers and system integrators will be most demanding professionals in upcoming years. Learning coding is the way to explore and to solve a problem in one or millions ways.

Coding is need of time whether you are looking for new opportunity, honing your skills, honing your hobby, honing your professional skills or finding a solution to a problem in a day to day life.

What skills required for a coder?

Coding is working with machines. It is not necessary that the value we put, the language we develop would be perfect. We learn and develop skills by trial and error. We need rationality and persistence to become a good coder. Coding helps you to explore the unknown facts of computer science. Coding helps learner to develop essential skills such as creative thinking, critical thinking, problem solving and logical thinking.

It is not exaggeration to say that “Code is the language of the modern world”. Coding will be the language of 21st century world students. Coding provides ample opportunities for students, and

parents. Skilled person will get more opportunities in the Artificial Intelligence equipped 21st century world.

Reference:-

<https://www.learningpotential.gov.au/articles/what-is-coding>

<https://hackr.io/blog/what-is-coding-used-for>

