"Coding"- the "new literacy"

With the evolution of more of our life into zeros and ones, our kids are coming online at a younger age and they coming online faster than any other time in history; it means that our kids will have an entirely different set of opportunities and challenges that we had. So, I believe that today's kids must also become fluent in a technical programming or scientific language because if big data, genomics, cyber and Robotics are among the high growth industries of the future the world is talking about then the people who will make their livings in these industries need to be fluent in the coding languages behind them as it will help them to converse technically with the people in different parts of the technical world. So, the now question arises ...what is this coding?

Coding is the art of telling a computer how to perform complex tasks. Once you know how to code, you can create virtual worlds within the computer where the only limit on what is possible is your imagination. Indian education policy makers must put this power into the hands and hearts of every child in India. Software is becoming a critical layer of all our lives. It is the language of our world. In the future, not knowing the language of computers will be as challenging as being illiterate or innumerate are today as someone also said **"Coding"- the "new literacy".**

The purpose of any school is to prepare students for a worlds we can't envisage so, in real life when our students stuck with something they have never seen before than our students must choose to think instead of remember and our policy makers, educators are well aware of this fact that, the coding, programming language also teaches our kids how to think in a very very different way. It teaches us about abstraction around breaking problems into small parts and then solving them around systems and how systems interconnect. So, learn to code fulfill the purpose of school in 21st century also.This is also a major reason that the subject of coding is getting international awareness these days and major countries like London, America and Estonia has already added coding in the curriculum and Singapore is planning to add it into the curriculum as in the 19th and 20th centuries, the challenge was to understand the physical world, and harness force and energy. This understanding percolated into the school curriculum. In the 21st century, the challenge is to understand and harness data, information and knowledge. Learn to code is a necessary way of introducing students to these concepts. In simple words we can also say that the education for the 21st century means teaching coding in the schools.

Indian policy makers also think seriously about adding coding in the curriculum, in fact some basic languages are already there in our schools at the higher secondary level but since there is no marks for these, teachers and students don't take it seriously so policy makers must create awareness as well as train teachers and most importantly should do some changes in the policy and add coding at junior level and also make mandatory for the benefits of the students as we explained above how coding is helping to achieve the purpose of schools.

Learning to code is like any language and it can easily be introduced at school level infact the practical situation is that students are learning to code on their own after school times at various computer centers so if our policy makers introduced this at school level it will be brilliant idea and moreover give benefits to mass students and also we can see this as a long – term solution to the "skills gap" between the number of technology jobs and the people qualified to fill them which will also fulfill our current governments goal of skill India and job creation.

The Scratch programming languages already used widely by aware kids and parents and most of the tech savvy schools as it is freely accessible online and Secondly, Codeacademy is also running online courses in programming and also used by tech savvy schools which is very much suitable of school students.The Indian students, parents and schools can use them till the time our policy makers introduce coding to the currilcum to fulfill the purpose of school - to prepare students for a worlds we can't envisage.

By :- Raman Bansal , Director , Scholar's Pride Sr Sec School , Dhuri (Punjab)