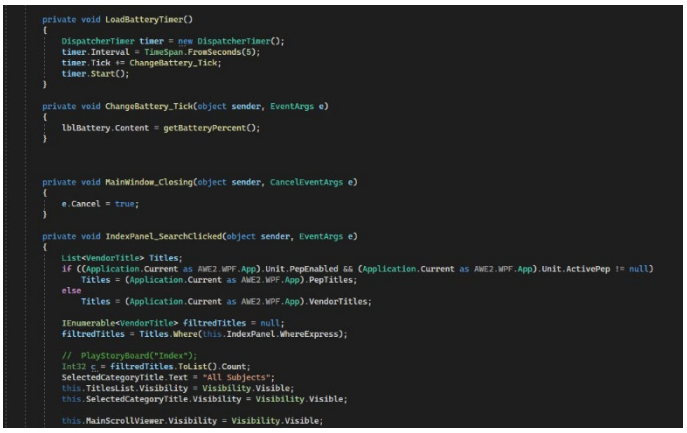
Why has coding become such an important part of a child's learning?

Coding is becoming an essential skill needed for the future as part of the transition into a more digital world. But what is coding and why is it so important? Coding is what makes it possible to create computer software, desktop applications, cellular applications, games, websites and so much more. All digital technology runs on some form of code including the apps on your phone, Tik Tok, Facebook, Instagram, and any website you visit. What is Computer Coding you must be wondering? Simply, Ccoding is the process of writing computer programs. Coding is how humans talk with computers. There is an abundance of languages that can be used to write programs and even more frameworks to run them.



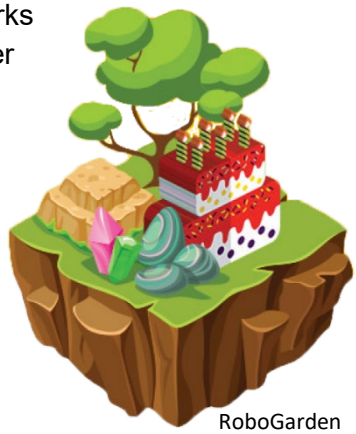
AWE Learning Code

Brian Smith, Senior Director of Software Engineering, AWE Learning states ***"Programming is the next fundamental building block in early childhood development. Students, given the opportunity to learn how to program at a young age, will surely improve cognitive processes and problem-solving skills no matter where they are headed in life. In pursuit of the next frontier, the Software Engineer uses all their expertise to make the human-computer world a bigger and better place."***

Why has it become so important for children to learn to code? Coding is becoming as common in children's learning as core subjects like math or social studies. It has been said that in the next 5+ years more than half of the jobs will require some sort of coding experience. Introducing coding to children at a younger age gives them an appreciation of how technology works just as they learn to appreciate how the body works. We all know how important technology has become in our daily lives. Society is surrounded by computers, tablets, smartphones, and gaming systems at some point in any given day. According to Raise Smart Kids, there are many benefits to learning coding at a young age, from how children think, to the developmental skills they will need when they become adults. Raise Smart Kids identifies 14 benefits of coding for kids and students including 4 major benefits below

1. **Positive Screen Time:** Most children spend at least 1-2 hours a day in front of some sort of screen (phones, tablets, TV, or gaming systems). Encouraging 20 minutes of that screen time to learn about coding, and how to code, would mean over 100+ hours of coding learning in a year.
2. **Problem-Solving Skills:** Coding helps teach children the importance of solving a problem on their own. It helps teach how to break down a problem into segments.
3. **Critical Thinking & Perseverance:** Through coding children learn to be persistent when solving problems. Coding inspires young learners to think outside of the box and sends a message to kids that they can construct anything from nothing if they are willing to put in the effort.

4. **Creativity & Self Confidence:** Coding gives the child a feeling of being a part of the “magic” that happens behind the screen. Learning code encourages children to use their imagination and figure out how to make something out of very little. When a code works it builds the child’s sense of confidence and encourages them to try harder coding.


RoboGarden

RoboGarden gives today's students a head start and a significant career advantage. In a substantial and ever-growing number of jobs, programming skills are just as critical as skating is to hockey. Coding and artificial intelligence literacy are essential drivers of success in the digital economy. RoboGarden playground product is designed to enforce all required skills for creativity and entrepreneurship for today and the future," remarks Dr. Mohamed Elhabiby, President & CEO of RoboGarden Inc.

With the help of coding, our children will learn not only practical skills but also life skills that they can use for the rest of their life. Let’s encourage our young learners to spend their time doing any activity that will change their life for the better; let’s guide them toward coding!

References:

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