Coding as a Literacy for the 21st Century

Matthew Lynch

The idea of teaching coding to children is not new. Back in the 1960s, a visionary named Seymour Kershner developed the Logo programming language for children, called “KIBO,” allowing users to take big ideas and bring them to life. Kershner was a futurist, who believed that children would need to learn how to create their own animations, interactive stories, and games. He knew that this would be crucial for the future, to equip children for the 21st century workforce.

Today, Mr. Kershner’s vision is more timely than ever. As computers become smaller and more affordable, children can now code with a computer, a tablet, or even their mobile phone. Coding can now be taught in the classroom, and it is no longer limited to the computer lab.

The metaphor of “playground vs. playpen” is helpful to better understand this shift. A “playpen” is a place where children are confined to a specific area with limited tools and materials. In contrast, a “playground” is a place where children are free to explore, create, and experiment. The same concept applies to coding. Just as children can use both a playpen and a playground, so too can children use both a desktop computer and a tablet.

This shift in technology empowers children to create their own animations, interactive stories, and games. It also empowers children to learn new skills and problem-solve--while having fun. In a coding playground, children become producers, not only consumers, of digital artifacts that can be shared with others.

The National Science Foundation (NSF) encourages educators to incorporate coding into their curriculum so they grow up to have a voice and to play a role in our civic resolution, and imagination, playpens are limited. Within the pedagogical approach that empowers children to create their own animations, interactive stories, and games.

The idea of teaching coding to children is not new. Back in the late 1960s, my mentor, Seymour Kershner, anticipated that the technology would get smaller and the thinking bigger. That is to say, children could learn how to think in new ways by programming computers to do hard work.

According to the National Science Foundation (NSF), children can use both a desktop computer and a tablet. The NSF recommends that educators incorporate coding into their curriculum so they grow up to have a voice and to play a role in our civic resolution, and imagination, playpens are limited. Within the pedagogical approach that empowers children to create their own animations, interactive stories, and games.

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