PTA Curriculum Committee
January 23, 2023

Goal 2:

To develop a K12 Scope and Sequence for three main areas:
- Computer Science,
- Robotics,
- Computer Assisted Design.

Goal 2: Considerations

- Computer science in New York New York currently has 31,438 open computing jobs (3.9 times the average demand rate in New York).

- The average salary for a computing occupation in NY is $100,813, which is significantly higher than the average salary in the state ($58,910).

- New York had only 3,801 computer science graduates in 2015; only 18% were female.

"There is a lack of talent in technology, and we need to be encouraging kids in school to learn how to code. We need to encourage computer science as a major. We need to encourage entrepreneurism."
– Jon Oringer, founder and CEO of Shutterstock

Computer Science and Digital Fluency Learning Standards

The New York State K12 Computer Science and Digital Fluency Learning Standards were adopted by the Board of Regents in December 2020. The new standards focus on five key concepts:

Impacts of Computing

Computational Thinking

Networks & System Design

Cybersecurity

Digital Literacy

Each concept contains two or more sub-concepts and within the sub-concepts are a number of standards. The standards are grouped into grade-bands: K-1, 2-3, 4-6, 7-8, and 9-12. Instruction in the standards must be implemented so as to allow students to achieve the applicable standards by the end of the band.
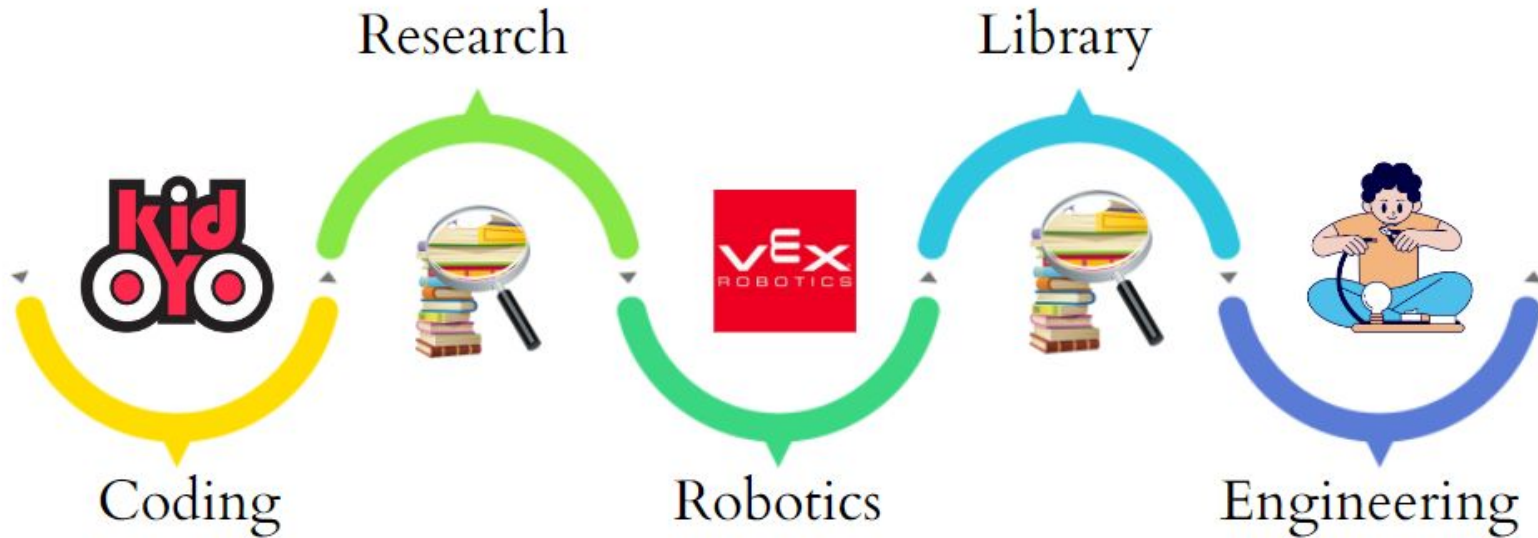
New York State

Computer Science and Digital Fluency Learning Standards

GRADES K-12

December 2020

New York State
EDUCATION DEPARTMENT
Knowledge > Skill > Opportunity

How might a K-12 Coding, Robotics & Engineering Framework Look?

Reflection

- What is the positive consequence for our children to experience coding and robotics throughout their K-12 experience?

- What is at least one thing you learned from tonight's session?

- What is something that you would like to share with Nicole, Jim, and the district?