I </> CODE

Coding for Young Minds
Pre-K to 1st Grade

Our team of experienced early childhood educators and researchers are here to deliver an integrated computer science curriculum for young children (age 4-6) in your afterschool or summer program. All curricular materials and professional development for teachers are provided at no cost to the school.

ST. JOHN'S UNIVERSITY

I-CODE is a research project funded by St. John's University.

Integrated Curriculum

The coding curriculum integrates math, literacy and computational thinking skills into one cohesive unit.

Inquiry-Based Learning

Children develop critical thinking and problem solving skills by learning to code with educational robotics.
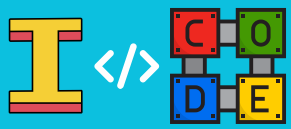
Immersive Experience

Children engage in rich storytelling experiences that enhance their ability and confidence to navigate and understand technology.

DR. JENNY YANG
ASSISTANT PROFESSOR

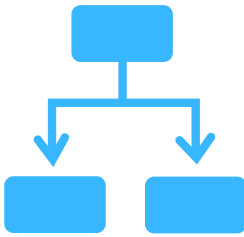Project I-CODE
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How We Work

Participants

1

Eligible students are English learners, students with disability, or low-income students, age 4 to 6. Informed consent will be collected from the participants, including parents, students, and teachers.

Student Groups

2

Participating students will be randomly assigned to two groups, C and S. Both groups will receive instruction in computational thinking and coding.
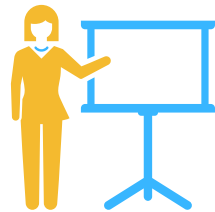
Coding Curriculum

3

Group C teacher will implement the Cubetto curriculum for 8 lessons over 2-3 weeks, for 45min to 1 hour each session. Group S teacher will implement the school-adopted computer science curriculum, such as CS4All curriculum.

Classroom Observation

4

Both classrooms will be observed to document students' learning behaviors during the coding lessons.

Evaluation

5

Students in both classes will take brief tests before and after the coding curriculum to evaluate learning progress in computational thinking skills.

Dr. Jenny Yang
Assistant Professor
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