# Overview of Project

Mission: Engage in a Research Practice Partnership (RPP) to create one of the first, codified curricula for underrepresented populations in prekindergarten that teachers can apply to differently resourced classrooms. This is funded by the National Science Foundation (NSF)

Products:

- 18 activities to be taught twice a week for 9 weeks
- A digital platform that will facilitate coding readiness
- Lesson plans for teachers that will blend digital platform and use of manipulatives to teach CT
- Professional development for teachers

Leaders of the Research Practice Partnership
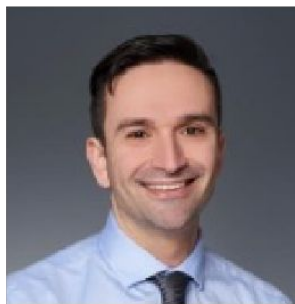
codeSpark

Joe Shochet

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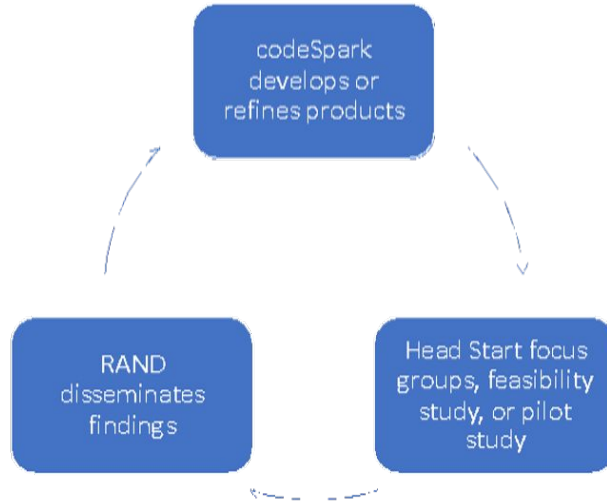John Pane

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Development Cycle

| Cycle 1: Fall/Winter 2021/2022 Initial Feedback | Cycle 2: Winter/Spring 2022 Mockups | Cycle 3: Summer/Fall 2022 Prototype | Cycle 4: Winter/Spring 2023 Feasibility Study | Cycle 5: Summer/Fall 2023 Pilot Study | Winter/Spring 2024: Data Analysis, Journal Articles, Final Revision of Curriculum |

codeSpark develops or refines products

RAND disseminates findings

Head Start focus groups, feasibility study, or pilot study

The RPP will undergo 5 cycles of development and feedback:

- NHSA recruits community members

- RAND organizes and summarizes feedback

- codeSpark incorporates feedback into curriculum design and refinement

The Five Development Cycles

Cycle 1: Fall/Winter 2021/2022 Initial Feedback	Cycle 2: Winter/Spring 2022 Mockups	Cycle 3: Summer/Fall 2022 Prototype	Cycle 4: Winter/Spring 2023 Feasibility Study	Cycle 5: Summer/Fall 2023 Pilot Study	Winter/Spring 2024: Data Analysis, Journal Articles, Final Revision of Curriculum

Focus Groups will be composed of 7 teachers, 7 parents, and 3 administrators
Play Testing will occur with 7-10 prekindergarteners

- Fall 2021: Focus Groups to understand attitudes towards coding readiness

- Spring 2022: Focus Groups to provide feedback on prototypes

- Fall 2022: Focus Groups and play testing to provide feedback on refines prototypes

- Spring 2023: 2-3 teachers pilot partial curriculum in feasibility test to understand how it works in the classroom

- Fall 2023: Randomized controlled trial in 60 classrooms of full curriculum

Study Sign up

Interested in being part of the study? Sign up at: **bit.ly/nhsastudy**

Coding Readiness Concepts to Cover

Modeling: Using abstract symbols to represent objects, actions, and other processes.

Sequencing: Commands and actions must follow a certain order to reach an outcome.

Modularity: Complex tasks or outcomes can be broken down into a series of steps.

Looping: Actions can be repeated a desired number of times to reach an outcome.

Patterns: Actions can follow a series of repeated steps, often operationalized with loops.

Debugging: Problems can be solved through a systematic analysis of individual steps.

What have we done so far?

Overview: To date, Cycle 1 has been completed. As part of Cycle 1 the Research Practice Partnership has done the following:

- Created protocols for Head Start parent, teacher, and administrator focus groups
- Conducted focus groups or interviews with six parents, seven teachers, and three administrators
- Reviewed findings as a group

What are we doing now?

- We are in the middle of Cycle 2!
- codeSpark has done some thinking on prototypes
- We are currently holding focus groups to get opinions from the Head Start Community

We want to hear from you too!

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