



BUILDING A FOUNDATION FOR CODING IN PRE-K AND KINDERGARTEN

CIEC 700
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Curriculum and Instruction
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Questions

- What is unplugged coding and how does it build the foundation for coding?
- How do you start with unplugged coding and move into using and coding robots?
- How can coding be used to meet standards in Pre-K and Kindergarten classrooms?
- What types of coding programs are available for children under 8 years old?



Unplugged Coding

- Unplugged coding is using coding skills and algorithms without technology

McLennan 2020

- Coding uses algorithms, which are a set of instructions used to complete a task or to solve a given problem in sequential order

Ricketts 2018

- “It’s not that act of coding but the thinking within the coding that is important: the multifaceted learning environment that coding promotes is what we are striving to create in the classroom for all children”

McLennan 2020



Where to Start?

- Board Games
- Familiar Stories
- Sequencing Activities
- Learn About and use Maps



Strategies

- Concrete
- Representational
- Abstract



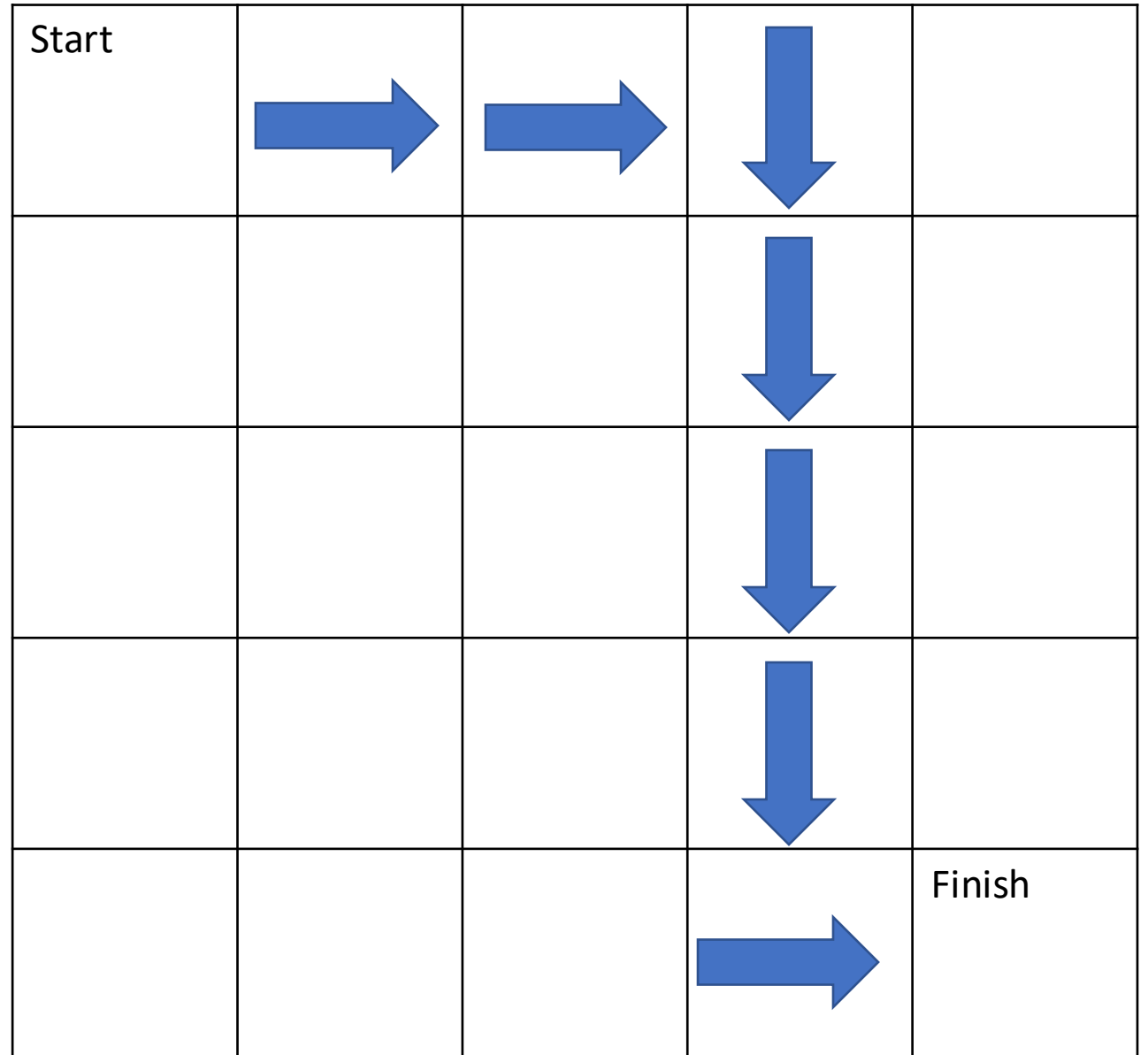
Meeting Standards

- Computational Thinking
- Communication Skills
- Spatial Awareness
- Vocabulary
- Problem-Solving
- Directional Language
- Patterning
- Number Sense
- Executive Function Skills



Robots and Apps

- Bee-Bots
- Mouse Bot
- Indy
- Sphero



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