Preparing for and Teaching Kira's Middle School Course

kira

Housekeeping Items

Webinar is recorded

Slides available along with the recording

Enter your questions in the Q&A box

Watching On Demand, and have questions?

tn@kira-learning.com for platform/course

ashe@battelle.org for anything else

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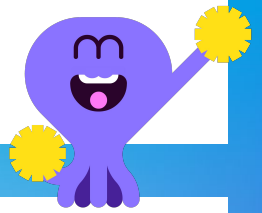
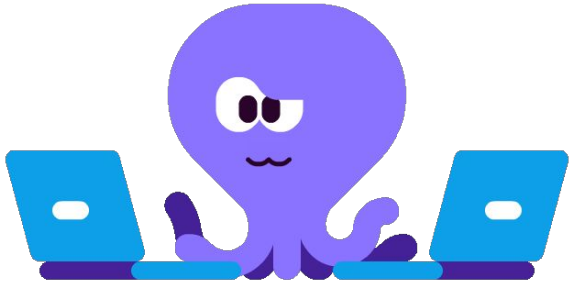


December 12, 4 PM CT

Preparing for and teaching the Kira Learning High School Course

Webinar Goals

- What is the Middle School CS course?
  - Curriculum Guide / Learning Targets / TN Standards
- How does the course engage students?
  - Short videos
  - Interactive programs
  - Interesting examples
- Course demo
  - Introduction to Programming Using Platypus
  - Data Representation
  - The Internet and the Impact of Computing

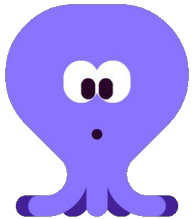


What is the Middle School CS course?

The Kira middle school course is a 3-Unit, 25-30 hour course (e.g., a six-week course with 50 minute periods)

Learning Targets:

By the end of this course, students will understand:



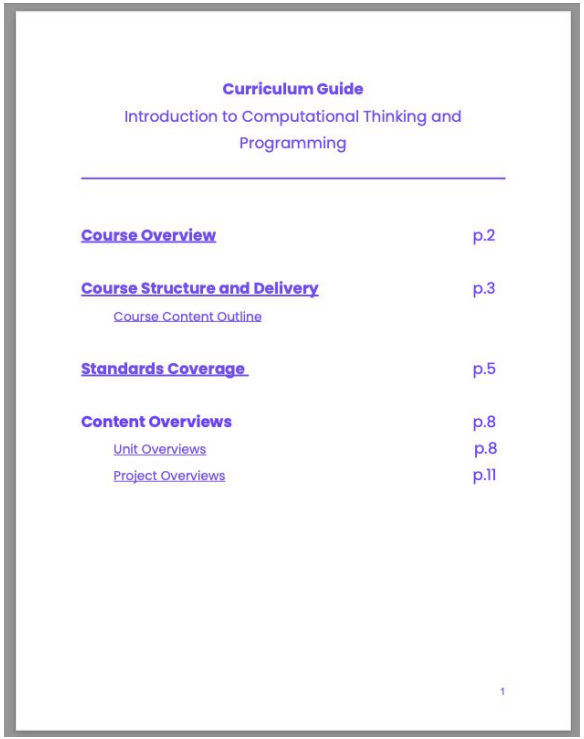
- Fundamentals of algorithmic and computational thinking
- Button-based coding in the Python Programming language
- Data representation, collection and analysis
- Networks and Internet Basics
- Ethical considerations of computing and responsible digital behavior

The course is delivered with multiple modes of instruction, and the units are modular, with minimal dependencies between them.

Every lesson and unit concludes with an assessment, and every unit also has a student project.

What is the Middle School CS course?

There is a comprehensive Curriculum Guide: https://tinyurl.com/middle-school-curric



Curriculum Guide

Introduction to Computational Thinking and Programming

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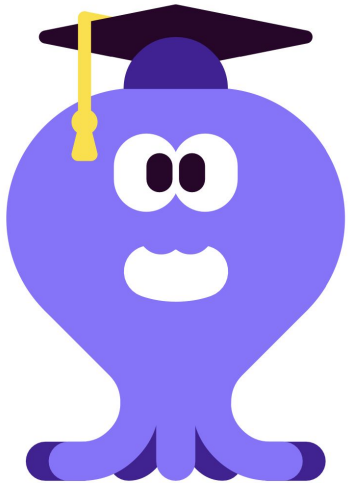
What Standards Does the Course Cover?

The middle school course covers all of the Tennessee Middle School Computer Science Standards.

Example of TN Standards from the Curriculum Guide:

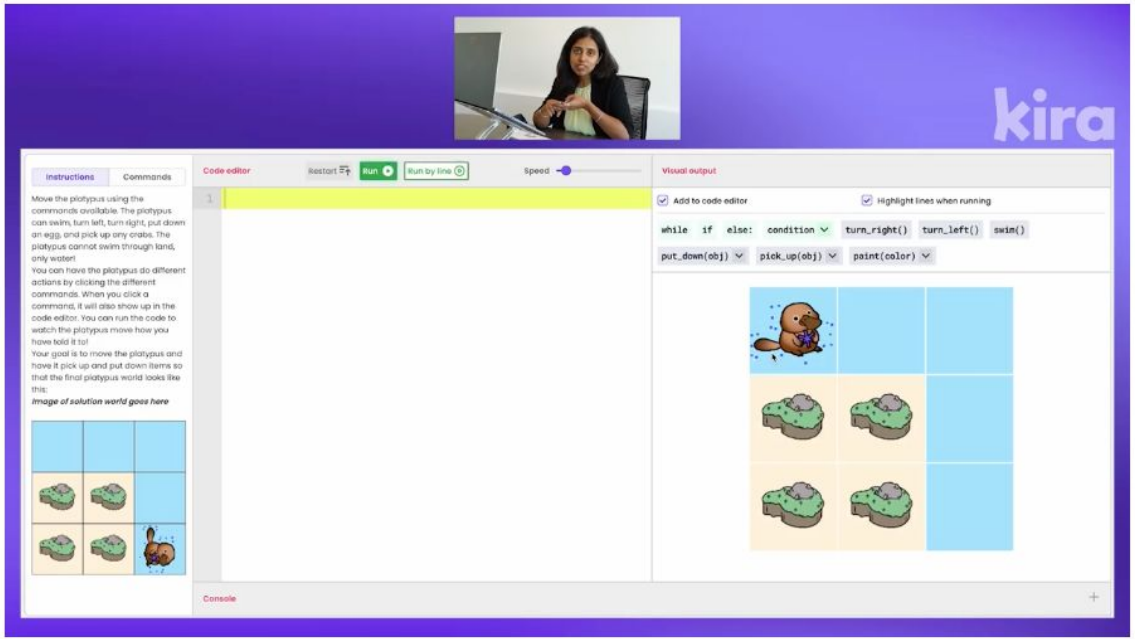
MS.PC: Programming Concepts	
Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.	Unit 1
Create procedures with parameters that hide the complexity of a task and can be reused to solve similar tasks.	Unit 1
Seek and incorporate feedback from team members and users to refine a solution that meets user needs.	Mini Project 1
Provide proper attribution when incorporating existing code, media, and libraries into original programs.	Unit 1



How does the course engage students?

The middle school course provides interesting and engaging curriculum

Short videos with a focus on demonstration



How does the course engage students?

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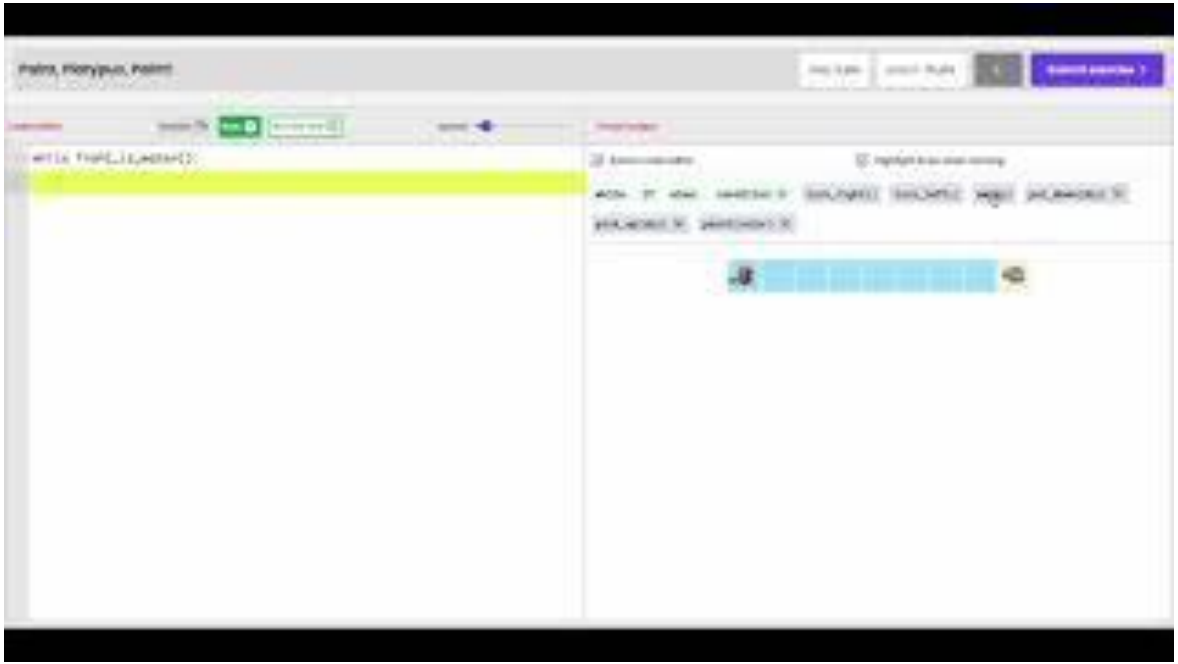
Interactive, graphical programs with a unique programming interface



The middle school course provides interesting and engaging curriculum

Interesting Examples

How does a message get from your computer to your friend's computer across the country?

Course Demo

- Introduction to Programming Using Platypus (Unit 1)
- Data Representation (Unit 2)
- The Internet and the Impact of Computing (Unit 3)

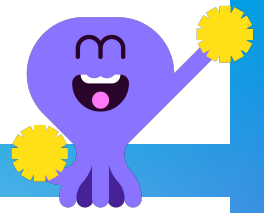
Final Thoughts

- The course has been designed to target middle school students
  - Middle schoolers get engaged by *doing*, which is what this course is all about

- We *want your feedback*! If you decide to teach the course, we welcome all feedback, and we promise to take all suggestions seriously

QUESTIONS?

Visit www.kira-learning.com or www.computersciencetn.org



For questions about the Kira platform or courses:

tn@kira-learning.com

For all other questions:

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