Professional Learning Program Examples

Code.org is excited to launch a new framework for professional learning that allows for customized workshops and sustained implementation supports that are tailored to the specific needs of regions, districts, and educators. This document represents three example program models, showcasing how the tools and resources can be combined and customized to meet diverse educational goals while also enhancing the adoption of ongoing implementation of Code.org's curriculum. By utilizing the new professional learning framework, there are a multitude of possibilities for successful implementation of computer science education using Code.org. .

Example #1: District-based CS Discoveries for 7th Grade CS and Tech Educators *(Thanks to the Friday Institute for Inspiring this Design)*

Curriculum	Computer Science Discoveries (7th Grade)
Audience	7th grade computer Science and Technology educators in a large school district. • 50% are familiar with Code.org • 50% are new Code.org
Implementation Goal	CSD will be offered in 75% of middle schools within the district.

PL Resource(s) Utilized	• Getting Started with Code.org
	  ○ Self-Paced Module
	  ○ Slide Template
	• Teaching CS Discoveries
	  ○ Self-Paced Module
	  ○ Slide Template
	• Teaching Interactive Animations and Games
	  ○ Self-paced Module
	  ○ Slide Template
	• Teaching AI and Machine Learning

	○ Self-paced Module ○ Slide template ● Equity in Computer Science Education ○ Self-paced Module ○ Slide template ● Reflection Prompt Guide
Program Modality(ies)	● Asynchronous independent work ● In-person workshop ● Virtual workshop ● Facilitator-hosted office hours
Program Model	**In-Person synchronous workshop (3-hours):** ● **Pre-Work:** Complete Getting Started with Code.org Self-Paced Module ● Introduction to Getting Started with Code.org ● Introduction to Teaching Computer Science Discoveries ● **Post-workshop asynchronous work**: Complete Teaching Computer Science Discoveries Self-Paced Module. **Facilitator-Hosted, Optional, Office Hours (1-hour)** ● Hosted weekly **Virtual Workshop #1 (1-hour):** ● **Pre-Work:** Watch model lesson ● Deep-dive into Interactive Animations and Games - Unit 3 CSD. ● **Post-workshop asynchronous work:** Complete Interactive Animations and Games - Unit 3 Self-Paced Module **Virtual Workshop #2 (1-hour)**: ● **Pre-Work:** Complete AI and Machine Learning self-paced module ● Deep-dive into CSD Unit 7: AI and Machine Learning **Virtual Workshop #3 (1-hour):**

	• **Pre-Work:** Complete Equity in Computer Science Education Self-Paced Module • Deep-dive into Equity in Computer Science Education **Virtual Synchronous Workshop (1.5 hours):** • **Pre-Work:** Updated or new lesson plan based on the new curriculum learned. • Presentation and feedback of artifact • Planning for the future **Deliverable Proof of Learning:** Updated or new lesson plan based on the new curriculum learned
Cost Considerations:	• Design of the Program Model based on district/educator needs • Facilitator(s)Travel • Facilitator(s) Preparation + Hosting of In person workshop • Facilitator(s) Preparation + Hosting of virtual workshops • Facilitator(s) hosting optional hours • Event Logistics and Operations

Example #2: Multi-district CS Connections for 3-5th Grade Media Specialists

Curriculum	Computer Science Connections (grade K-5)
Audience	K-5 Media Specialists from multiple small school districts in a region • Educators with limited-to-no prior Code.org Experience
Implementation Goal	75% of participants implement CSC with activity from 75%

	of students.

PL Resource(s) Utilized	• Getting Started with Code.org
	  ○ Self-Paced Module
	  ○ Slide Template
	• Teaching Computer Science Connections
	  ○ Self-Paced Module
	  ○ Slide Template
	• Teacher-Facing Reflection Prompt Guide

Program Modality(ies)	• Asynchronous independent work • In-person workshop • Virtual Community of Practice Sessions
Program Model	**In-Person synchronous workshop (3-hours):** • **Pre-Work:** Complete Getting Started with Code.org Self-Paced Module • **Pre-Work:** Watch model lesson of Coding Book Covers • Introduction to Getting Started with Code.org • Introduction to Computer Science Connections • Deep Dive into Coding Book Covers • **Post Workshop Asynchronous Work:** Complete Computer Science Connections Self-Paced Module **(Optional) Virtual Communities of Practice:** • Hosted virtually - meeting set-up/scheduled by the Regional Partner • No formal facilitation • Guided by prompts from Teaching Facing-Reflection Prompt Guide **Deliverable Proof of Learning:** Curriculum map that shows integration of Computer Science Connections into teaching sequence
Cost Considerations	• Design of the Program Model based on educator needs

	• Potential participant travel • Facilitator(s)Travel • Facilitator(s) Preparation + Hosting of In person workshop • Event Logistics and Operations

Example #3: District-based How AI Makes Decisions for 3-5 grade general educators

Curriculum	How AI Makes Decisions (grade 3-5)
Audience	General education, grade 3-5 educators in a large school district • The majority have no previous Code.org experience
Implementation Goal	75% of participants implement How AI Makes Decisions.

PL Resource(s) Utilized	• Getting Started with Code.org
	  ○ Self-Paced Module
	  ○ Slide Template
	• Teaching How AI Makes Decisions
	  ○ Self-paced Module
	  ○ Slide template.
	• AI 101
	  ○ Self-Paced Module
	  ○ Slide deck template.
	• Teaching CS Fundamentals
	  ○ Self-Paced Module
	  ○ Slide deck template.
	• Reflection Prompt Guide

Program Modality(ies)	• Asynchronous independent work • In-person workshops

Program Outline	**In-Person synchronous workshop (3-hours):** • **Pre-Work:** Complete Getting Started with Code.org Self-Paced Module • **Pre-Work**: Complete AI 101 self-paced module. • Introduction to Getting Started with Code.org • Introduction to AI 101 • Deep Dive into Teaching How AI Makes Decisions • **Post Workshop Asynchronous Work:** Create a section and add students to the section. Assign How AI Makes Decisions **In-Person synchronous workshop (3-hours):** • **Pre-Work:** Document thoughts, successes, and challenges as educators implement curriculum. • Small-group discussions to reflect on pre-work documents, offer feedback and suggestions for improvement. • Introduction of CS Fundamentals as next steps **Deliverable Proof of Learning:** Submit student works samples to showcase student learning.
Cost Considerations	• Design of the Program Model based on educator needs • Potential participant travel • Facilitator(s)Travel • Facilitator(s) Preparation + Hosting of In person workshops • Event Logistics and Operations

Example #4: *AI 101 for Educators - Prepare to Host HoC AI for Oceans and AI Ethics*

Curriculum	Getting Started with Code.org AI 101 • HoC - AI for Oceans • HoC - AI Ethics
Audience	• 3-8 grade educators who want to host an HoC related to AI but don't feel comfortable or know how to get started. ○ No previous CS or Code.org experience required
Implementation Goal	75% of participants host an AI - HoC in their classroom by December 31, 2024

PL Resource(s) Utilized	• Getting Started with Code.org
	  ○ Self-Paced Module
	  ○ Slide Template
	• AI 101
	  ○ Self-Paced Module
	  ○ Slide Template
	• AI for Oceans (Hour of Code)
	• AI Ethics (Hour of Code)

Program Modality(ies)	• Virtual synchronous workshop • Facilitator-hosted office hours • Asynchronous independent work
Program Model	**Kick-off Virtual synchronous workshop (90 min):** • **Pre-Work:** Complete Getting Started with Code.org Self-Paced Module • Introduction to Getting Started with Code.org • Introduction to AI 101 • **Post Workshop Asynchronous Work**: Complete AI 101 Self-Paced Module _____ **Option 1: Virtual synchronous workshop (90 min):** • Deep Dive into AI for Oceans • **Post Workshop Asynchronous Work:** Create a section for your class and assign AI for Oceans

	Option 2: Virtual synchronous workshop (90 min): • Deep Dive into AI Ethics • **Post Workshop Asynchronous Work:** Create a section for your class and assign AI Ethics _____ **(Optional) Facilitator-led Office Hours:** • Hosted Weekly _____ **Closing Virtual synchronous workshop (60-min)** *(will take place AFTER HoC)*: • **Prework:** Identify top 3 student projects • Breakout rooms: share top students projects • Reflection: What went well, what can be improved next time? • Next Steps and future planning. **Deliverable Proof of Learning:** Presentation of top 3 student projects from HoC
Cost Considerations	• Design of the Program Model based on educator needs • Facilitator(s) Preparation + Hosting of In person workshop • Event Logistics and Operations