## **COMPREHENSIVE K-12 CODING CURRICULUM**









## What is Tynker? THE EASIEST WAY TO TEACH COMPUTER SCIENCE IN SCHOOLS



#### **BLOCK AND TEXT CODING**



#### COMPREHENSIVE CURRICULUM





#### AUTOMATIC ASSESSMENTS



#### CLASSROOM MANAGEMENT



PROFESSIONAL DEVELOPMENT

#### BLOCKS -> </>CODE



## Trusted by 150,000 schools

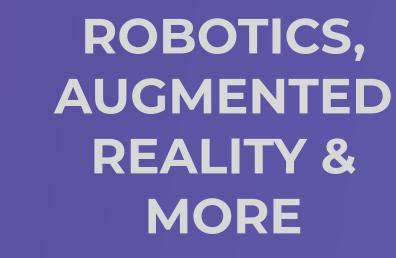
AVAILABLE ON WEB & MOBILE PLATFORMS

STEM COURSES



## Tynker empowers students to become makers







n start Baout multiplication





C<sup>×</sup>



### **ICON & BLOCK** CODING

TEXT

CODING

VIRTUAL

**DATA SCIENCE** AND AI

76

DIGITAL

Move forwa. forward(); for(i=0;i<20;i++){</pre> if(i>2) { turnLeft(); el if ); HTML in instanceof JS S



On Start

Repeat 3

Attack



## 100,000,000 users world-wide!



## Trusted by thousands of districts and schools



thousands more! **150 Thousand** Schools use Tynker

400 Million+ Coding lessons completed

8 Billion+ Lines of code written by kids!







## 1600 hours of scaffolded curriculum



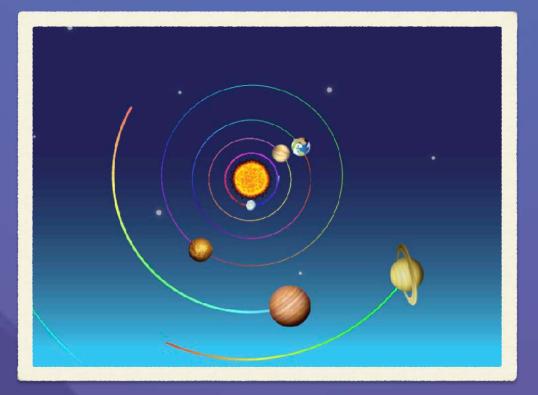
**10 pre-reader** courses

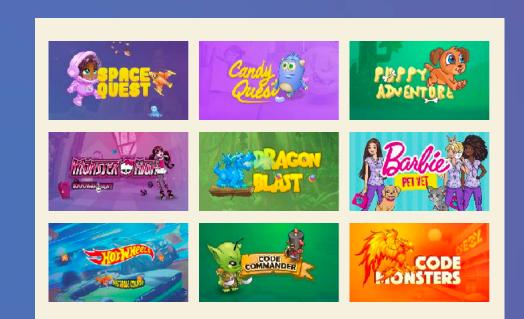


**15 block coding** courses









### **500 Hour of Code** challenges



#### **12 text-coding** courses



**5 electives: LEGO,** micro:bit, AR, drones, Al





# Tynker curriculum

Packages Available for 2023-2024 School Year

Course Name	Grade	Level	K-2 Code Prep	Elementary School	Middle School	K-8 School	High School	AP
10 Pre-reader Courses++	K-2	Beginner	$\checkmark$	$\checkmark$		$\checkmark$		
Space Cadet	K-2	Beginner	$\checkmark$	$\checkmark$		$\checkmark$		
Dragon Spells	K-2	Intermediate	$\checkmark$	$\checkmark$		$\checkmark$		
Programming 1A, 1B	K-2	Beginner	$\checkmark$	$\checkmark$		$\checkmark$		
20 Digital Literacy Video Courses	K-5	Beginner		$\checkmark$		$\checkmark$		
Programming 101, 102	3-4	Beginner		$\checkmark$		$\checkmark$		
Lego WeDo Coding	1-5	Beginner		$\checkmark$		$\checkmark$		
6 STEM Level 1 Courses	3-5	Beginner		$\checkmark$		$\checkmark$		
Augmented Reality	3-8	Intermediate		$\checkmark$	$\checkmark$	$\checkmark$		
Microbit 101	6 & up	Intermediate		$\checkmark$	$\checkmark$	$\checkmark$		
Intro to Al	6 & up	Intermediate		$\checkmark$	$\checkmark$	$\checkmark$		
Programming 201, 202	5-6	Intermediate		$\checkmark$	$\checkmark$	$\checkmark$		
6 STEM Level 2 Courses	6-8	Intermediate			$\checkmark$	$\checkmark$		
Programming 301, 302+	7-8	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
Drone Coding	5 & up	Beginner			$\checkmark$	$\checkmark$	$\checkmark$	
JavaScript 101+	6 & up	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
Python 101 <sup>+</sup>	6 & up	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
Web Development +	6 & up	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
MicroPython 101 +	6 & up	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
Python 201 <sup>+</sup>	8 & up	Advanced			$\checkmark$	$\checkmark$	$\checkmark$	
Data Science 1	9 & up	Advanced					$\checkmark$	
Artificial Intelligence	9 & up	Advanced					$\checkmark$	
Java 101	9 & up	Advanced					$\checkmark$	
Intro to CS with Art (Processing)	9 & up	Beginner			1		$\checkmark$	
AP Computer Science Principles	9 & up	Intermediate						$\checkmark$
AP Computer Science A	9 & up	Advanced						$\checkmark$

+ Not Available on iPad.

**Ï**Y∩K₿R

++ Only available on Tynker Junior App



# Scaffolded coding curriculum



**Pre-reader Pack** 



Programming 1A

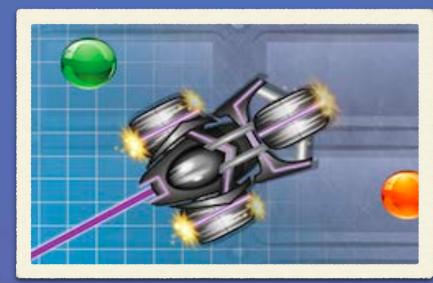




Programming 100



**Programming 201** 

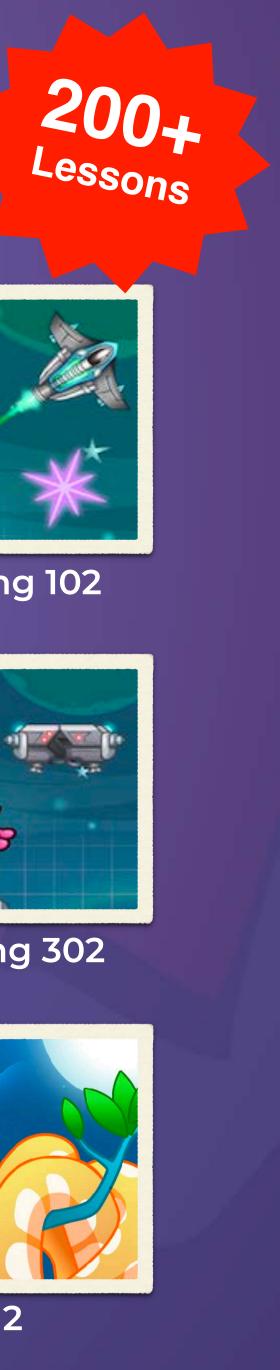




Programming 300



JavaScript1

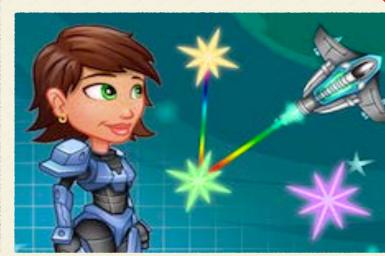


© Tynker

**Programming 1B** 



**Programming 101** 



Programming 102

Programming 202



**Programming 301** 



Programming 302



Python 1



Web Dev 1



Python 2

# **Digital Literacy Topics for K-5**

**GRADES K-2** What is a Computer? **Using Computers** What is a Computer Network? What is Data? **Computer Errors** What is a Computer **Program? Digital Citizenship and** Cybersecurity **History of Computing** 

### **GRADES 3-5**

- **All About Computers**
- **Computing Applications**
- **Careers in Computing**
- **Computer Networks**
- **Storing Data**
- **Data Analysis**
- **Troubleshooting Problems**
- **Algorithms and Programming**
- **Digital Citizenship**
- Cybersecurity
- **Evolution of Computers**
- Accessibility and Usability









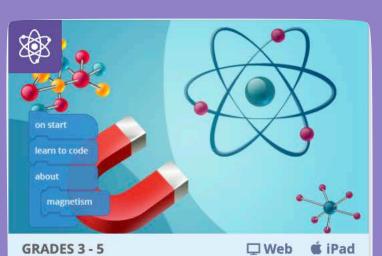
## STEM Coding Courses



#### Life Science 101

Beginner • 17 Lessons • 22 Activities

A collection of fun programming projects about topics in biology, anatomy, and...



#### **Physical Science 101**

Beginner • 14 Lessons • 20 Activities

A collection of fun programming projects about topics in physics and chemistry.



#### Earth Science 101

Beginner • 20 Lessons • 20 Activities

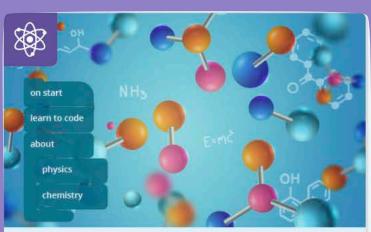
A collection of fun programming projects about topics in geology, meteorology,...



#### Life Science 201

Intermediate • 31 Lessons • 22 Activities

A collection of fun programming projects around topics in biology, anatomy, an...



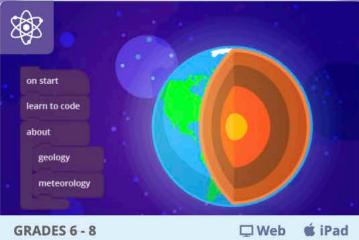
**GRADES 6 - 8** 

#### **Physical Science 201**

🖵 Web 🧉 iPad

Intermediate • 23 Lessons • 22 Activities

A collection of fun programming projects about topics in physics and chemistry.



Earth Science 201 Intermediate • 19 Lessons • 22 Activities

A collection of fun programming projects about topics in geology, meteorology,...

## Integrate coding into all subjects with over 200 PBL lessons



#### Math 101

Beginner • 24 Lessons • 50 Activities

A collection of fun projects that use programming to solve math problem..



GRADES 3 - 5

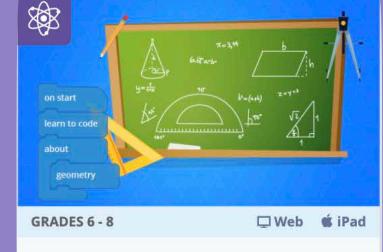
🖵 Web 🗯 iPad

#### Social Studies 101

Beginner • 12 Lessons • 28 Activities

A collection of fun programming projects about topics in history, geography, civic...





#### Math 201

Intermediate • 11 Lessons • 22 Activities

A collection of fun projects that use programming to solve math problem ...



**GRADES 6 - 8** 

#### Social Studies 201

🖵 Web 🧉 iPad

Intermediate • 17 Lessons • 22 Activities

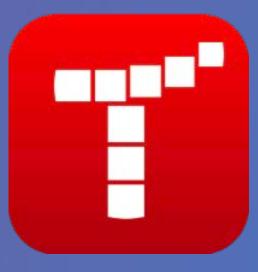
A collection of fun programming projects about topics in history, geography, civic...



# Mobile apps included with plans



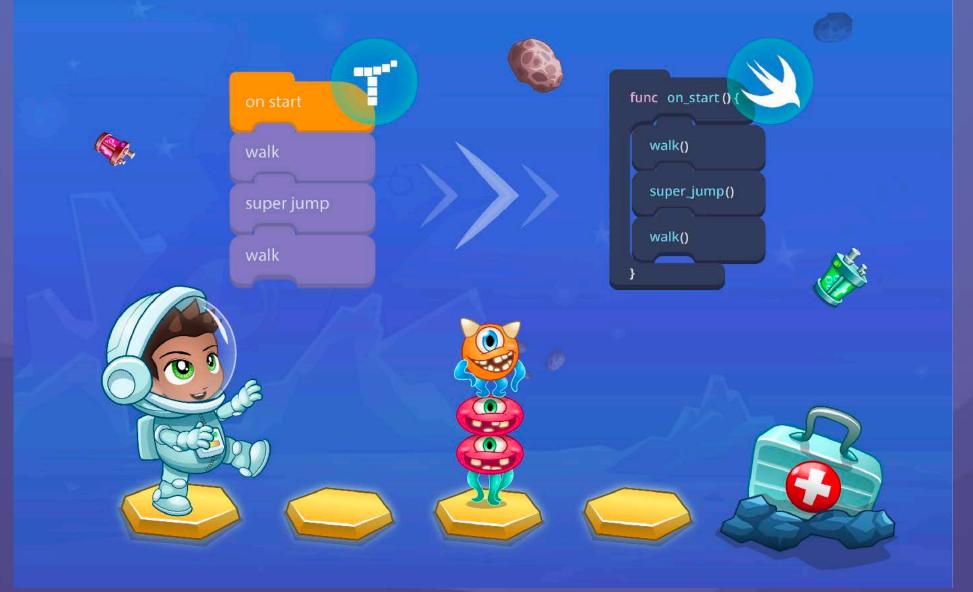
**Tynker Junior** Ages 4-6



Tynker Ages 7+

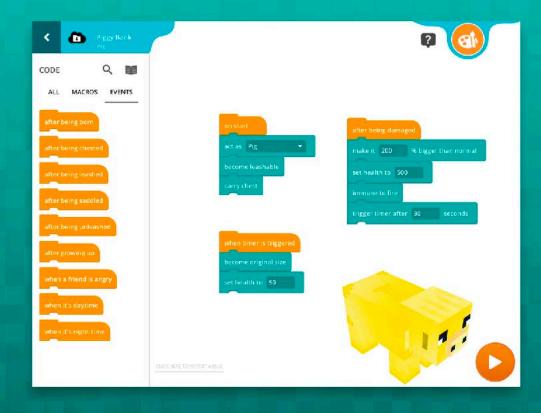


Control drones and robots





#### Use picture-coding, no words



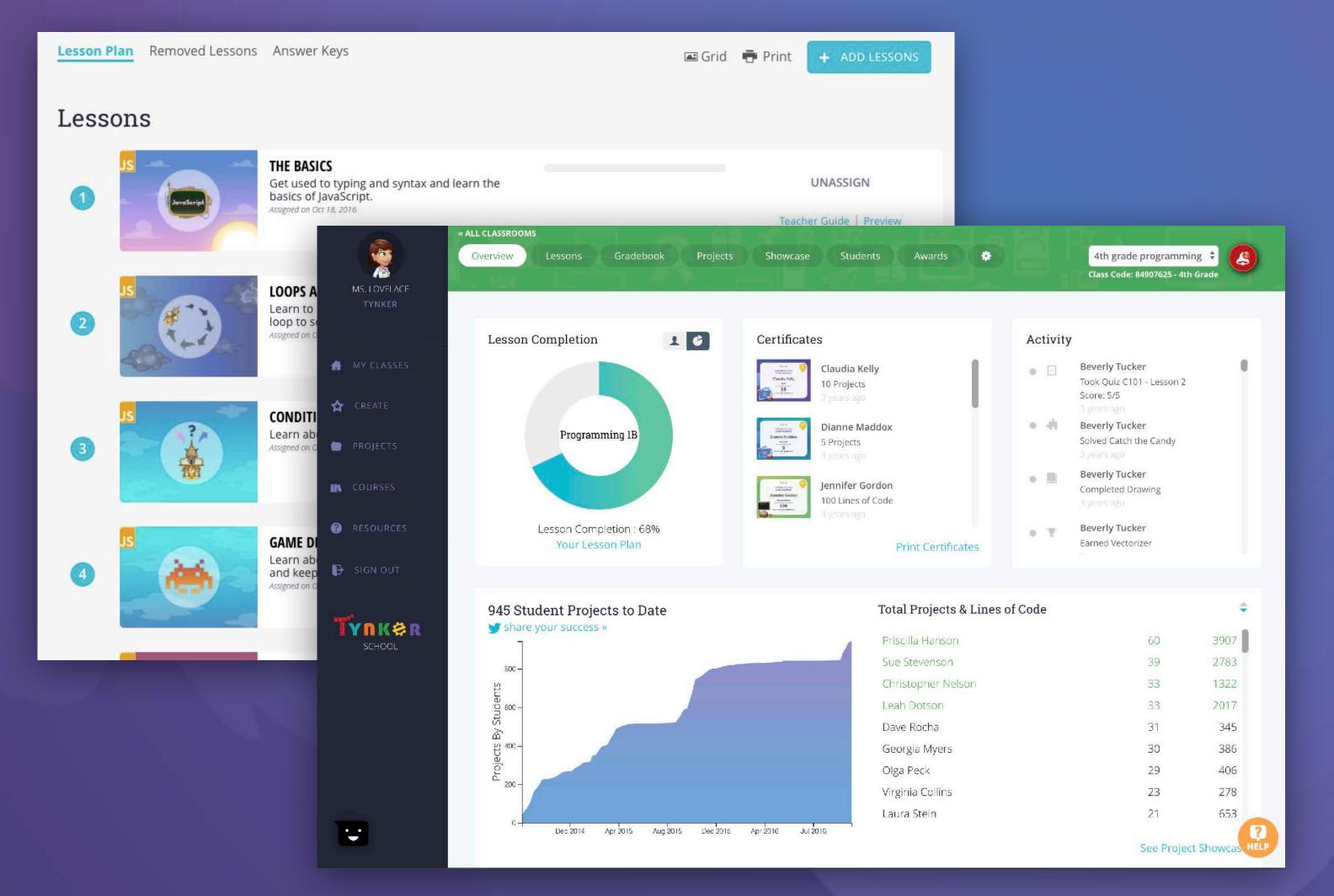
Use code to modify the behavior of any mob

#### Model 3D mobs and edit behaviors

#### Learn Block-coding and Swift



## Powerful tools save time and effort for educators



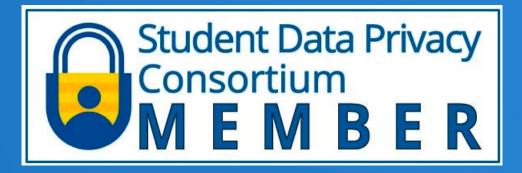
### **Educator Dashboard**

- **Distance Learning**
- Import student roster
- Guides and answers keys
- Lesson plans
- Mastery charts
- Shared showcases
- Asynchronous chats
- Help & forums
- **Resources and help**



## Clear commitment to student privacy and security









### DATA

Student data is secure and owned by your district.

### PRIVACY

Tynker complies with federal and statelevel privacy frameworks. <u>See Details</u>

### COMMUNITY

Active moderation ensures that the community is a safe place to share and learn.



## Teachers can get started in minutes!



Google Classroom











 Easy-to-use dashboard with classroom and student management

 Integrates with most market-leading identity and rostering providers

 District and school level student and teacher management with CSV uploads

SmartPass allows pre-readers to sign in easily with a QR code.







## Tynker automatically tracks student mastery

	simple events	advanced costume handling	visibility	input/output	simple costume handling	simple sound playing	simple loops	simple conditionals simple motion	direction and turning	simple messaging	simple drawing	pen color	pen shade	music and instruments	basic physics	basic math	drawing actors	advanced events	conditional loops	advanced loops	conditional wait	advanced messaging	advanced animation	program control simple variables	variable watchers	screen bounds	color detection	detect conditions	fill color lavars	miscellaneous	graphic effects	advanced control	advanced motion	advanced physics	shape drawing	video	level design	platformer basics		nlatformar automatione
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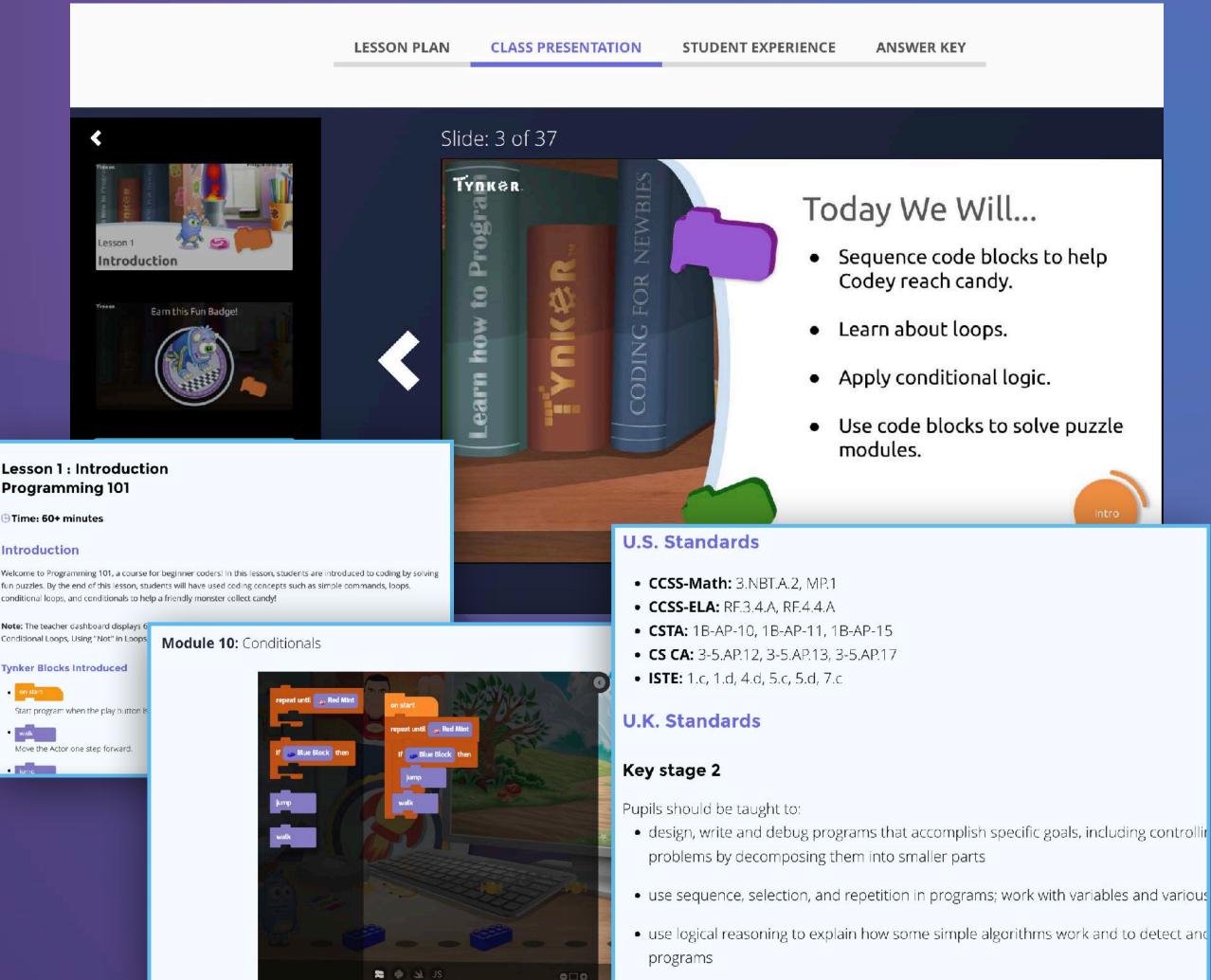
### Student scorecards and class metrics are updated in real time

### **Students are automatically assessed as they**

- View interactive tutorials
- Solve coding puzzles
- Complete projects
- Answer quizzes
- Finish lesson modules



## Teacher-centric lessons save time



- Class presentation
- ✓ Vocabulary
- ✓ Warm-ups
- ✓ Answer keys
- ✓ Lesson notes
- ✓ Standards
- ✓ Automatic assessments



## Standards alignment







PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER







✓ CSTA ✓ ISTE ✓ AP CSA, AP CSP ✓ CCSS ELA and Math ✓ NGSS ✓ UK Standards ✓ US State CS Standards provided on request



# Tynker School Plans (Page 1 of 2)

### **K-2 SCHOOL** PLAN

★ 10 pre-reader courses+ ★ 4 block-coding courses \*

+ via Tynker Junior, Tynker Apps \* Via tynker.com

**400** students - **\$2,400** per school year **OR \$15 per student** (50 student min)

## ELEMENTARY SCHOOL PLAN

- ★ 10 pre-reader courses
- ★ 12 block-coding courses
- ★ 4 electives (AI, AR, micro:bit, LEGO)
- ★ 6 STEM courses
- $\star$  500+ Hour of Code puzzles
- $\star$  200+ do-it-yourself tutorials

Combination plans and multi-year discounts available. Email <u>sales@tynker.com</u>

### 400 students - \$3,600 per school year **OR \$20 per student** (50 student min)

## MIDDLE SCHOOL PLAN

- ★ 5 block-coding courses
- ★ 6 text-coding courses
- ★ 4 electives (AI, AR, micro:bit, drone)
- ★ 6 STEM courses
- $\star$  500+ Hour of Code puzzles
- $\star$  200+ do-it-yourself tutorials

400 students - \$3,600 per school year **OR \$20 per student** (50 student min)



# Tynker School Plans (Page 2 of 2)

### **K-8** SCHOOL PLAN

- ★ 10 pre-reader courses
- ★ 15 block-coding courses
- ★ 6 text-coding courses
- ★ 5 electives(AI, AR, m:bit, Lego, drone)
- ★ 12 STEM courses
- $\star$  500+ Hour of Code puzzles
- $\star$  200+ do-it-yourself tutorials

600 students - \$5,200 per school year **OR** \$25 per student (100 student min)

## HIGH **SCHOOL PLAN**

★ 8 text-coding courses

- Python 101/201, JavaScript,
- Web Dev, Java, AI,
- MicroPython, Data Science
- ★ 1 Art & computing course
- ★ 2 advanced block-coding courses
- ★ 100+ do-it-yourself tutorials

150 students - \$3,600 per school year **OR** 

\$50 per student (20 student min)

Combination plans and multi-year discounts available. Email sales@tynker.com

### ADVANCED **PLACEMENT PLAN**

★ Choice of AP Computer Science Principles OR **AP** Computer Science A

★ College Board endorsed

★ AP Curriculum Framework aligned

20 students - \$2,000 per school year



## Educators V Tynker!

"My students gained a better understanding of computer programming. They also gained a better understanding of the learning process and how to get feedback about a product and revise from that feedback."

> - Lisa Sato **6th Grade Teacher**

"Don't be afraid to teach it just because you don't have a background in computer science – anyone can learn with a visual programming language like Tynker."

> - Laura Hanna **Computer Lab Teacher & Robotics Coach**

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