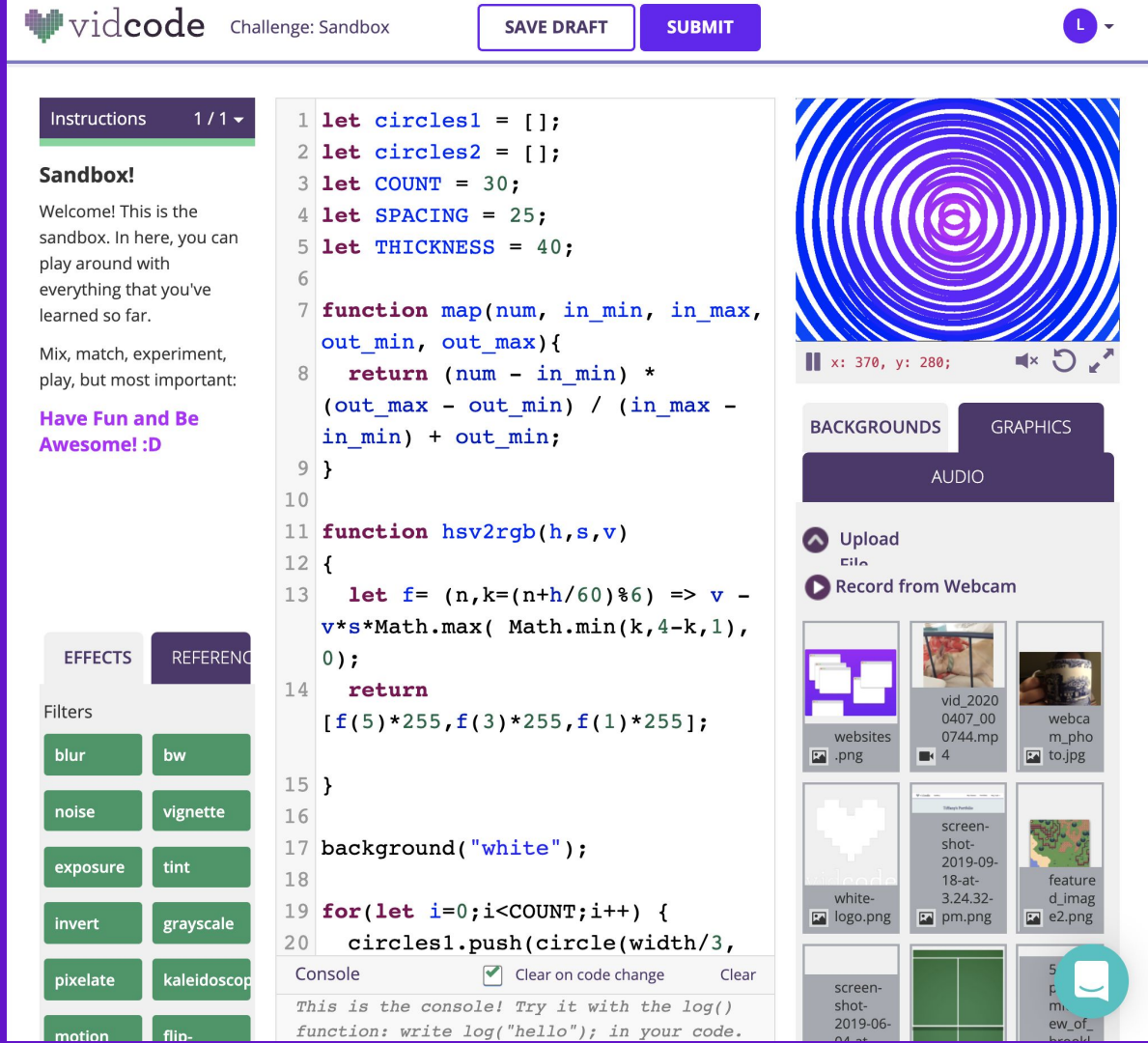
Computer Science built with teens in mind

Computer science courses for ages 9+

- Used by educators with **no coding experience**
- **Web-based**. No downloads required
- Highly visual & rigourous

- All online
- Over 150 coding tutorials (self-guided learning)
- Research-backed for learning outcomes



Intro **- Start with the basics** (Computer Science 101)

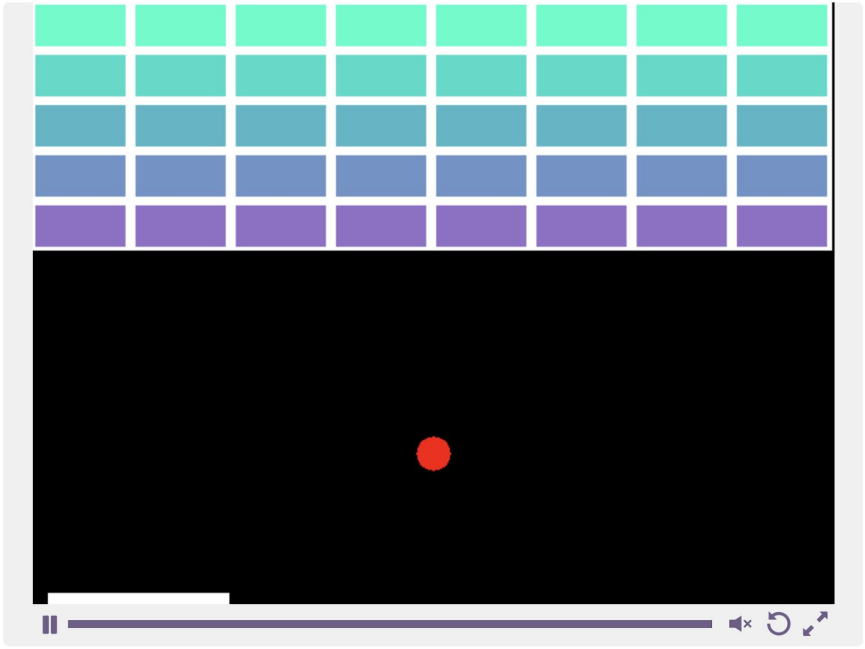
Ages 9 & up


```
movie = video();
movie.source = "city_sunset.mp4";


black_and_white(35);
tint("gray", 60);
```

Tutorial 1 of 150: *introduces text based programming, Hex colors and values.*

Intermediate **- Code video games** (Computer Science 301)

Ages 11 & up

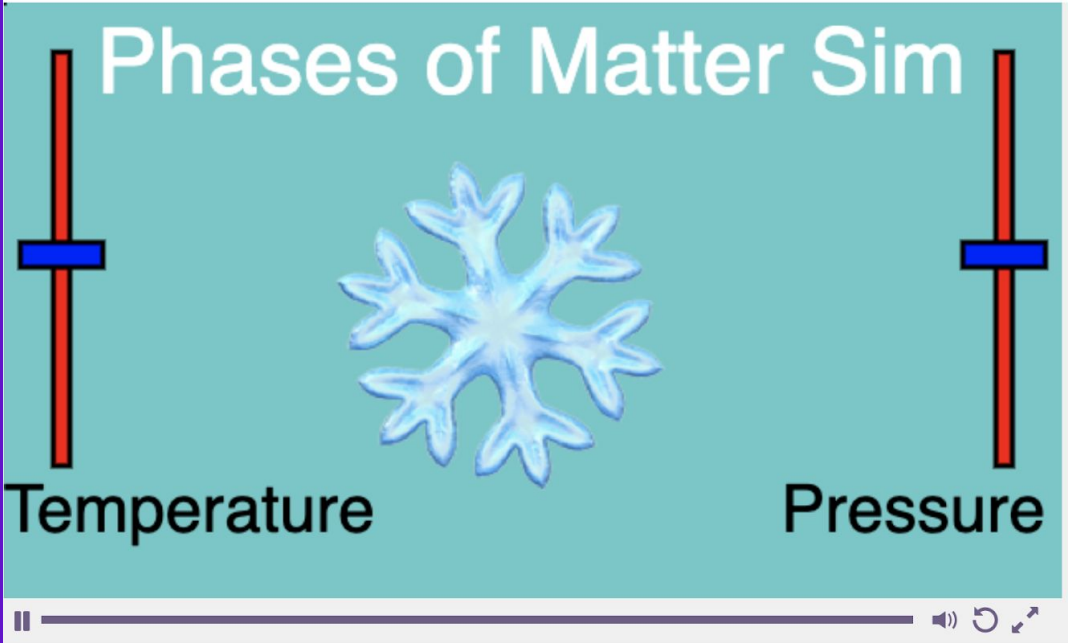


```
let constrain = (x,min,max) => {
  return x < min ? min : ( x > max ? max
}

function mapRange(num, in_min, in_max, ou
  return (num - in_min) * (out_max - out_
}

let Ball = function(_x, _y, _r) {
  let c = circle(_x, _y, _r,"#FF0000");
  let d = {x: Math.random()*2-1, y: 1};
  let v = 10;
  this.update = () => {
    c.x += v*d.x;
    c.y += v*d.y;
  }
  this.bounce = (r) => {
    let bounced = false;
    if( (c.x-c.radius) >= r.x && (c.x+c.r
      if(Math.abs(c.y - r.y) < c.radius
```

Tutorial 40 of 150*: covers physics, random & geometry to build custom games.*

Advanced **- Simulations** (Computer Science 601)

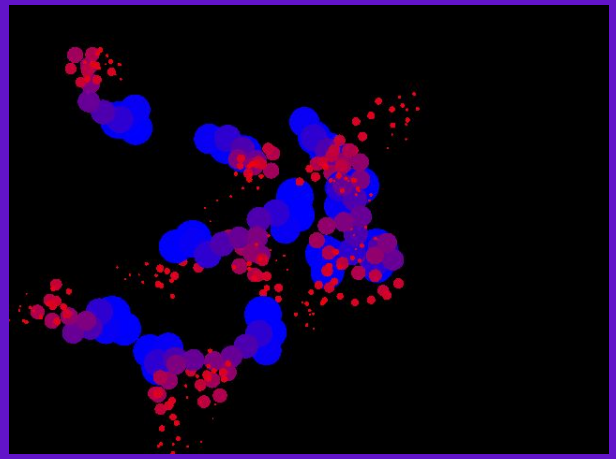
Ages 13 & up

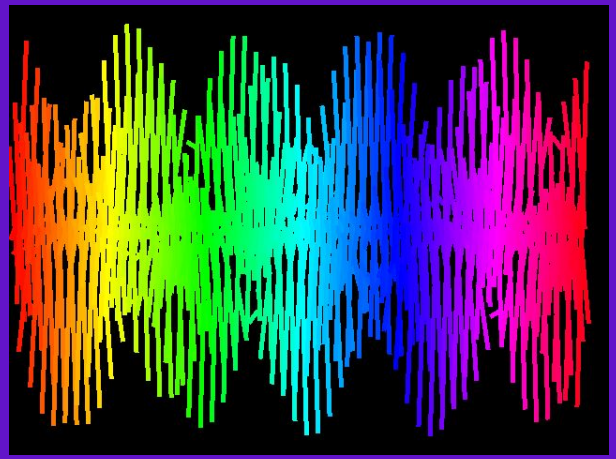



```
1  // Slider is an object
2  function Slider(barx, ba
3
4    // properties
5    this.movable = false;
6    this.bar = rect(barx,
7    this.handle = rect(bar
8
9    // methods
10   this.getValue = functi
11     return this.handle.y
12   }
13   this.handle.whenMouseI
14     this.movable = true;
15   }.bind(this);
16   this.setPosition = fun
17     if (this.movable){
18       this.handle.y =
19     }
```

Tutorial 100 of 150*: covers sliders, data & movable objects.*

Unique portfolios





12,000 teachers choose Vidcode for their STEM classes

LYONS USD 405

North Carolina Virtual Public School

Full & Half Year Courses

Aligned to CS standards by design - core concepts are baked in! Vidcode courses are rated #1 for alignment to both US and UK computer science standards K-12. Vidcode courses are reseach-backed and vetted by thousands of educators.

CROSS-CURRICULAR CODING

Beginner

Upper Elementary & Middle School

3 Units

INTRO TO JAVASCRIPT

Beginner

Upper Elementary & Middle School

4 Units

COMPUTER SCIENCE WITH JAVASCRIPT

Intermediate

High School

6 Units

Launching September

INTRO TO PYTHON

Beginner

Upper Elementary & Middle School

4 Units

Mini-Courses

DIGITAL CITIZENSHIP

Beginner

Middle School

5 Activities

GAME DEVELOPMENT

Intermediate

Middle & High School

12 Activities

Launching August

HARDWARE + JAVASCRIPT

Beginner

Middle School

5 Activities

Launching September

HTML + CSS

Beginner

Middle & High School

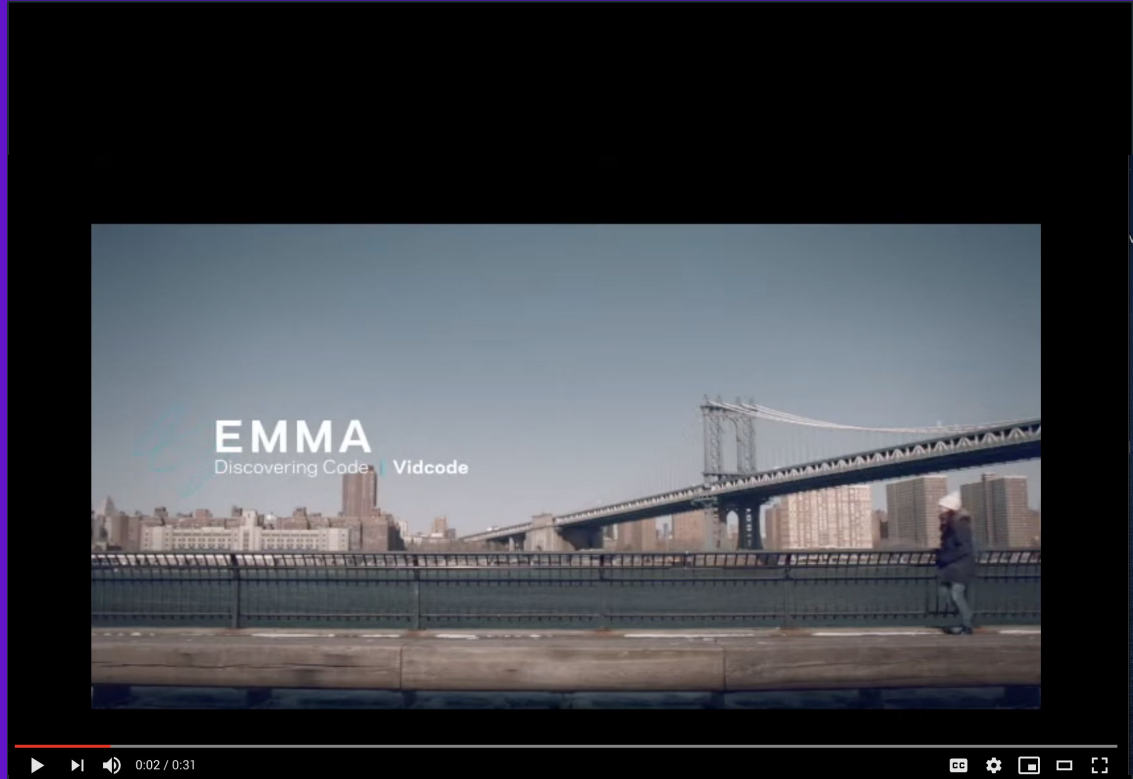
6 Activities

FERPA, COPPA, HIPAA Compliant

Student Privacy Pledge Signatory

1. Upload your **own** content

2. Make it interactive with code



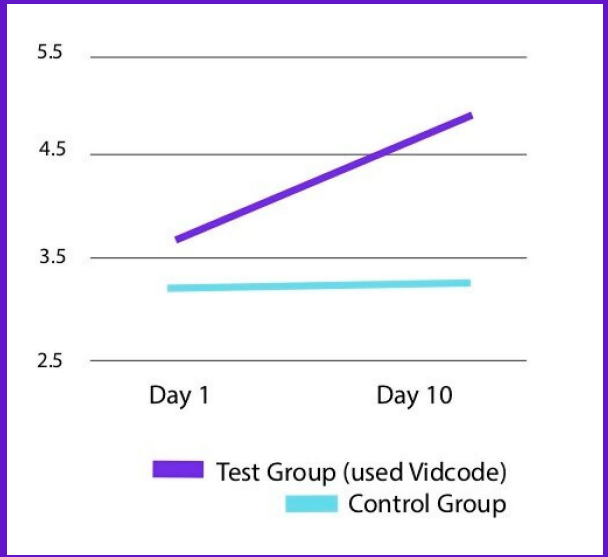
LINK TO VIDEO

Research: During School

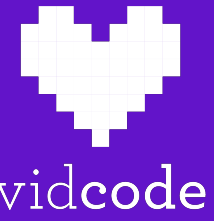
vidcode

20% increase

in students' computer science learning outcomes, *after 10 hours*



Research: During School



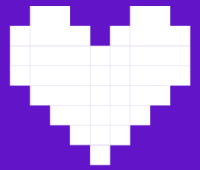
- Students' understanding of CS concepts improved, and teachers felt students could apply what they learned in other programming contexts.
- Vidcode was highly engaging to students, and appealed to girls as much as it did to boys.
- Vidcode was successful in reaching students who might not have otherwise tried coding.
- 88% of students say they enjoy studying computer science using Vidcode.

Research: After School

- Semester-long after-school program
- Combines film-making and code
- Students code PSAs on topics they choose

vidcode

Research: After School



Impact

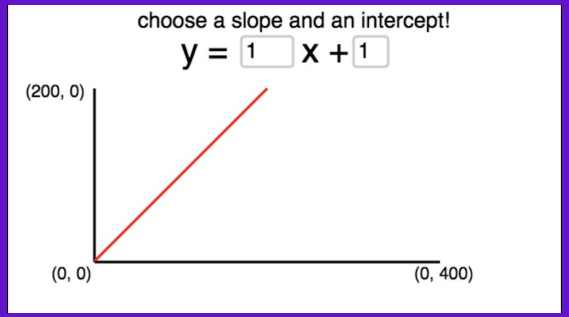
newknowledge.org

Survey Questions	Before	After
Confidence in their **coding abilities**	37%	**89%**
Identify as **programmers**	42%	**89%**
Thought of themselves as **“technology people”**	58%	**79%**

Projects are **multi-disciplinary**


```
1  // A sample video for your Black History Month resea
2
3  movie = stopmotion();
4
5  movie.frames = ["Mae-jemison.jpg", "Mae_Jemison_in_S
6
7  movie.interval = 800;
8
9  var box = rect(0,300,movie.width,100,"black","clear"
10
11 var title = text("Dr. Mae Jemison, Astronaut",40);
12 title.font = "Oswald";
13 title.y = 300;
14 title.color = "pink";
```

Math

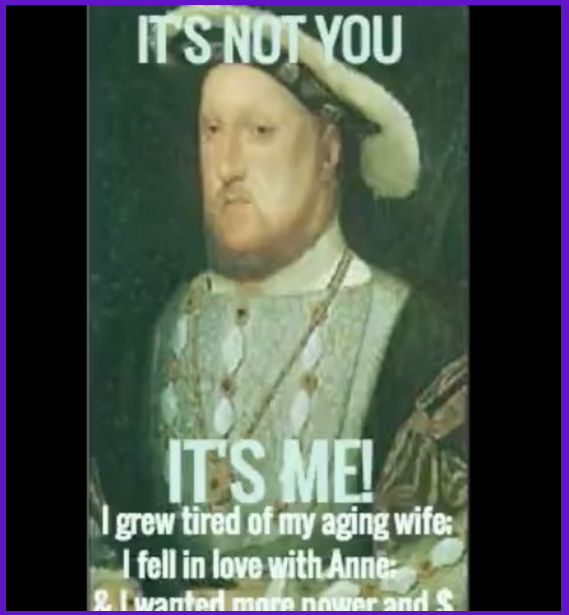


https://www.vidcode.com/share/HitShYT06C

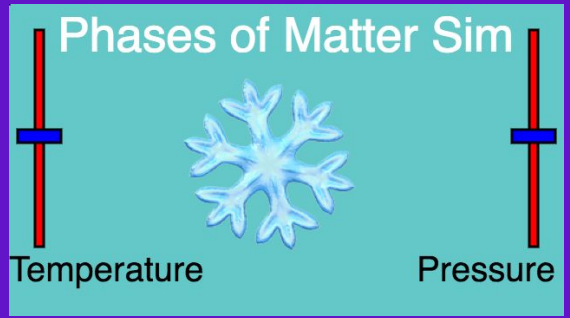
New Languages

https://www.vidcode.com/share/UWX29xzFyU

History



Science



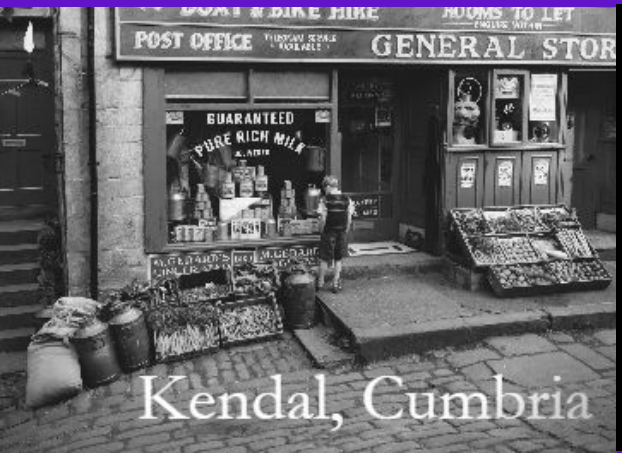
https://www.vidcode.com/share/70qK6BnTDG

ELA

https://www.vidcode.com/share/FGE0aSwKpO

Collaboration: English + Art Class

Students worked together to code postcards from the 1930s representing places in Arthur Ransome's ***Swallows and Amazons***



The Vidcode curriculum is **aligned by design** to Global CS Standards

and we've got the awards to prove it

Education Alliance Finland 2019

CERTIFIED
PEDAGOGICAL QUALITY

First Place 

Global Curriculum Alignment

By the Education Alliance of Finland, Summer 2019

EDUCATION ALLIANCE FINLAND
CERTIFIED 2019

Vidcode

Education Alliance Finland uses a method based on educational psychology and Finnish pedagogical knowledge to evaluate the quality of learning solutions. This EAF certified product is a well designed educational solution that aligns with learning science principles. Its design complies with research on learning and pedagogy and pursues to implement good practices in order to promote and support learning.

Olli Vallo | CEO
Helsinki, Finland

Education Alliance Finland

Education Alliance Finland 2019

Results

Curriculum Alignment – How many learning goals the product supports

Rank	Name	Total	UK CURRICULUM - Computing	CSTA K-12 Computer Science Standards
1.	**Vidcode**	**38**	13	25
2.	*Anonymous*	**32**	10	22
3.	*Anonymous*	**31**	21	10
4.	*Anonymous*	**22**	12	10
5.	*Anonymous*	**21**	10	11
	Anonymous	**21**	13	8
7.	*Anonymous*	**19**	10	9
8.	*Anonymous*	**12**	7	5
	Anonymous	**12**	6	6
10.	*Anonymous*	**9**	2	7

Companies included in August 2019 study:

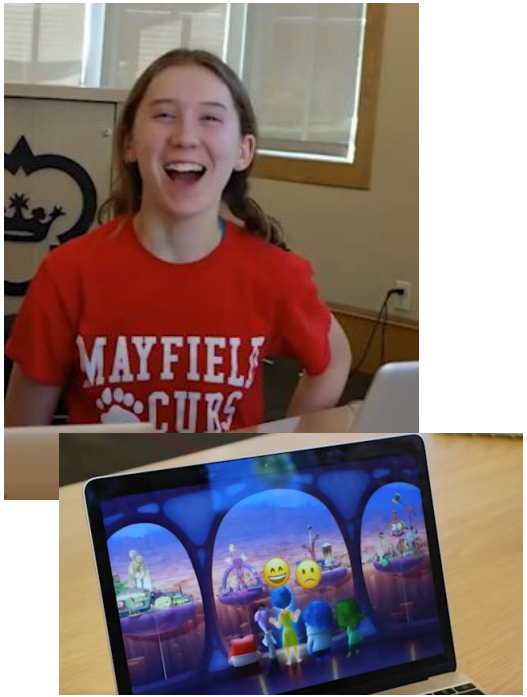
- Bomberbot
- Codemao
- CodeMonkey
- CodeSpark
- Coding Galaxy
- Dystopia 2153
- Hetao 101
- Kodable
- School of Fish
- Vidcode

What Teachers Say...

“ Vidcode is so young and vibrant. It gives students a sense of ownership. Vidcode is wonderfully visual and students don’t get left behind.

- *Ms. Cary, Teacher, United Kingdom*

What Students Say...



> “You can get **crazy and creative,** and I’ve enjoyed it so much. Being able to think **“what do I want to code today,” and be able to see it come alive.**
>
> - *Elisa, Mayfield High School Student*

"**I can't say enough positive things about this online learning environment.** The interactive lessons allowed students to create their own programs and see the results right away.

The support provided by the Vidcode team was outstanding.

I just think there is so much junk out there - that when one comes across such a wonderful tool for learning object oriented programming - one should shout it from the rooftops!"

Suzanna McGee

Computer Science Teacher, Notre Dame High School

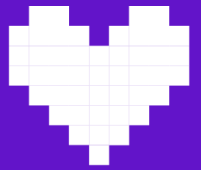
“As the projects become more complex, the lessons cover all the basics of object-oriented programming, from simple linear programming to complex object properties with user interactions, creating games and simulations. Programming is taught through interactive tasks, requiring minimal parental or teacher preparation and oversight, and teens are encouraged to add their own style and sense of humor to the projects they create.”

- Emily Crawford, ©2020 Parents’ Choice

Professional Development Resources

- Self-led virtual educator course
- 1-3 day virtual and in-person professional development sessions
- Live-chat and support line for teachers

Email info@vidcode.com to request PDF details of the above



Vidcode, online computer science courses built with teens in mind.

Sign up your school or district at **vidcode.com**