vidcode

Professional Development

Teaching students to code through a medium they love

- **Mission**: Provide an accessible and engaging way for all students to learn computer programming
- Reached **over 2M students** online and in person (an impact you're a part of!)
- Used by teachers with **no coding experience**
- **Web-based**. No downloads required

Our Purpose

Give teens a voice through technology

Work with national leaders and innovators

Prepare today's youth for tomorrow's workforce

vidcode

Vidcode teaches students how to **create their favorite things with code.**

Programming is behind the things students use every day

- Snapchat Filters
- Netflix Streaming
- Spotify Playlists
- Amazon Shopping
- SO MUCH MORE!

If students like....

Minecraft	Fashion	Harry Potter
Star Wars	Music	Twilight
Moana	Barack Obama	Wonder Woman
DJ Khaled's Snapchat	YouTube	The Internet

...they can learn to code

JavaScript & Creative Coding

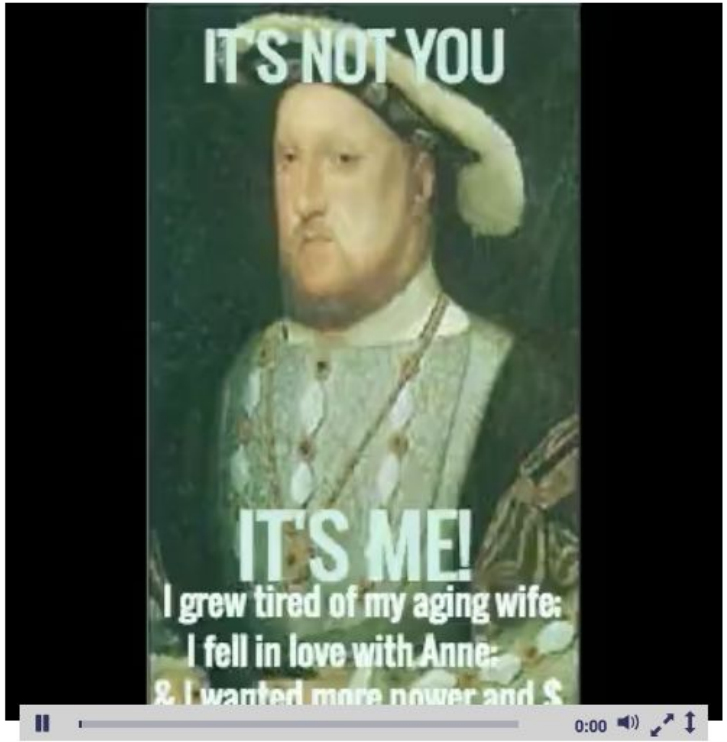
What can students make with **Creative Coding**?

```
1            movie.playbackRate = .2;
2  var my_text = text("steve.sleep()")
3
4  repeat(function(){
5   if(movie.currentTime > 0 && movie.currentTime < 1
6      my_text.message="steve.sleep()";
7    }
8    else if(movie.currentTime > 1.01 && movie.currer
9     my_text.message="steve.wakeup()";
10   }else{
11   ➤ my_text.message="steve.chop()";
12   }
13  }, 1);
14
15
```

method/argument

Coded by Nora Mulligan

https://app.vidcode.io/share/eu0zc1n90V

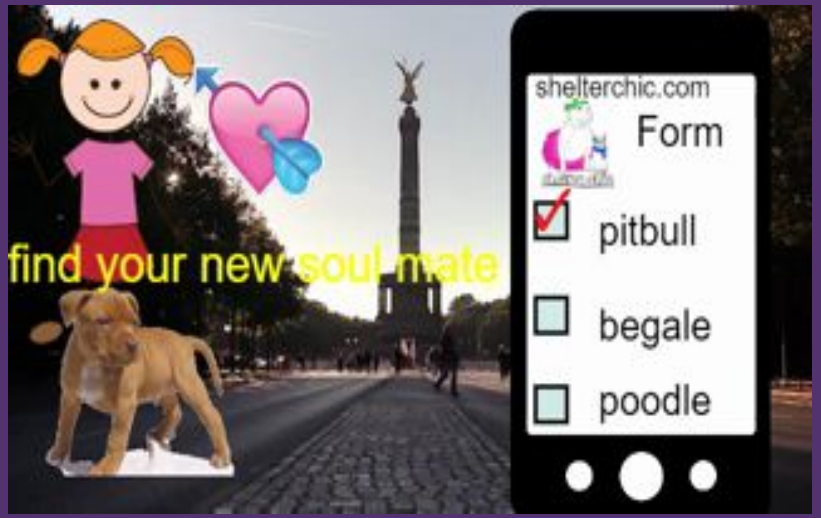



```
movie.frames = ["henryviii.png"];
var my_text1=text ("IT'S NOT YOU");
my_text1.size = 30;
my_text1.y=10;
my_text1.x=28
my_text1.font = "Oswald";
var my_text2=text ("IT'S ME!");
my_text2.size = 40;
my_text2.x=45;
my_text2.y=250;
my_text2.font = "Oswald";
var my_text3=text ("I grew tired of my aging wife;");
my_text3.size = 18;
my_text3.y=290;
my_text3.x=8
my_text3.color="white"
my_text3.font = "Oswald";
var my_text4=text ("I fell in love with Anne;");
my_text4.size = 18;
my_text4.x=20;
my_text4.y=315;
```

Say what you MEME about Henry VIII

Coded by MEmerson

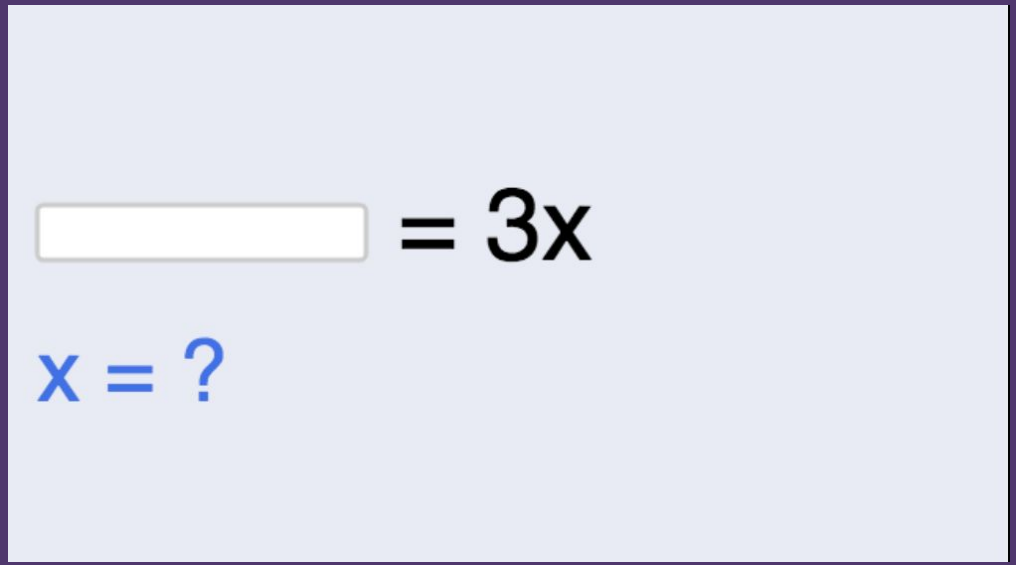
Pet Shelter Hackathon




```
1
2  var my_graphic = graphic("image2");
3
4  my_graphic.scale=0.25
5  my_graphic.x=400
6  my_graphic.y=3
7  var my_graphic2 = graphic("logo");
8  my_graphic2.scale=0.4
9  my_graphic2.x=415
10 my_graphic2.y=59
11 var my_text=text("shelterchic.com");
12 my_text.size=20
```

```
1    //create rectangle to be flag
2  var flag = rect(70, 30, 500, 300, "#e5f5fb", "c
3
4  //add graphic and use array to store values
5  var melon = graphic("6-2-watermelon-png-file.pn
6  var numbers = [0.5, 20, 80, 50];
7  melon.scale = (numbers[0]);
8  melon.rotation = (numbers[1]);
9  melon.x = (numbers[2]);
10 melon.y =(numbers[3]);
11
12 //create text and change stuff
13 var wm = text("w a t e r m e l o n");
14 wm.font = "Marker Felt";
```

https://app.vidcode.io/share/UWX29xzFyU



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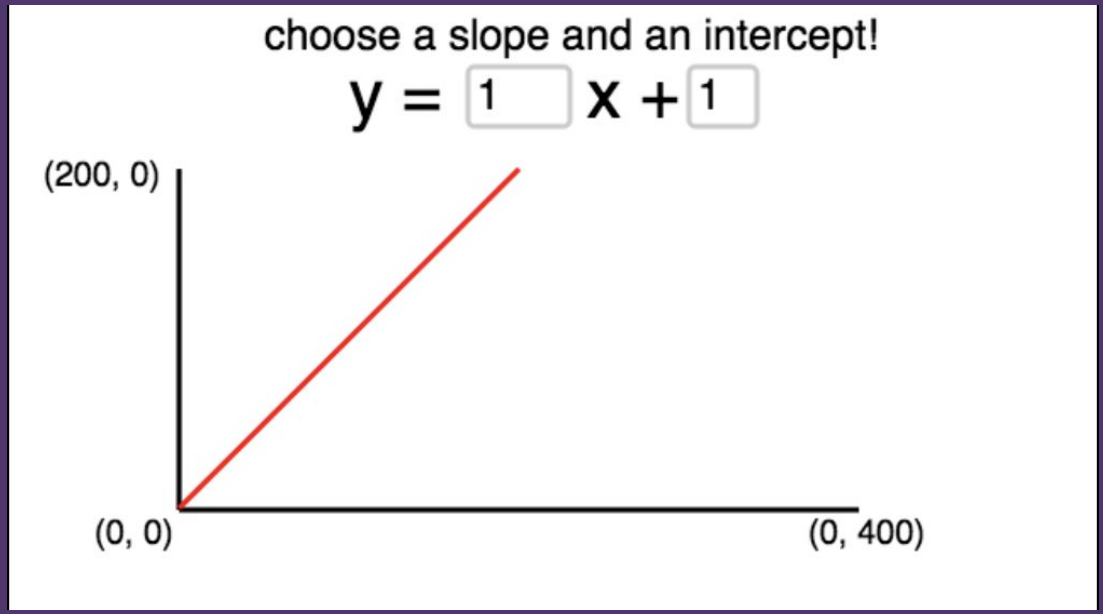

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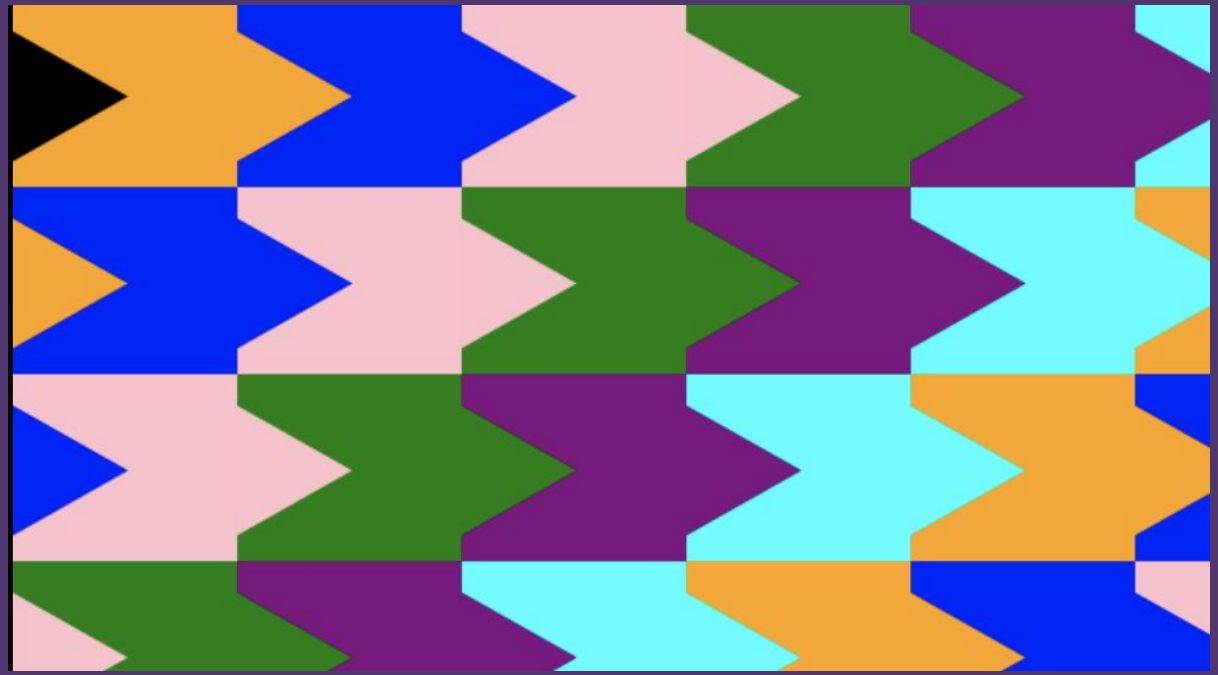

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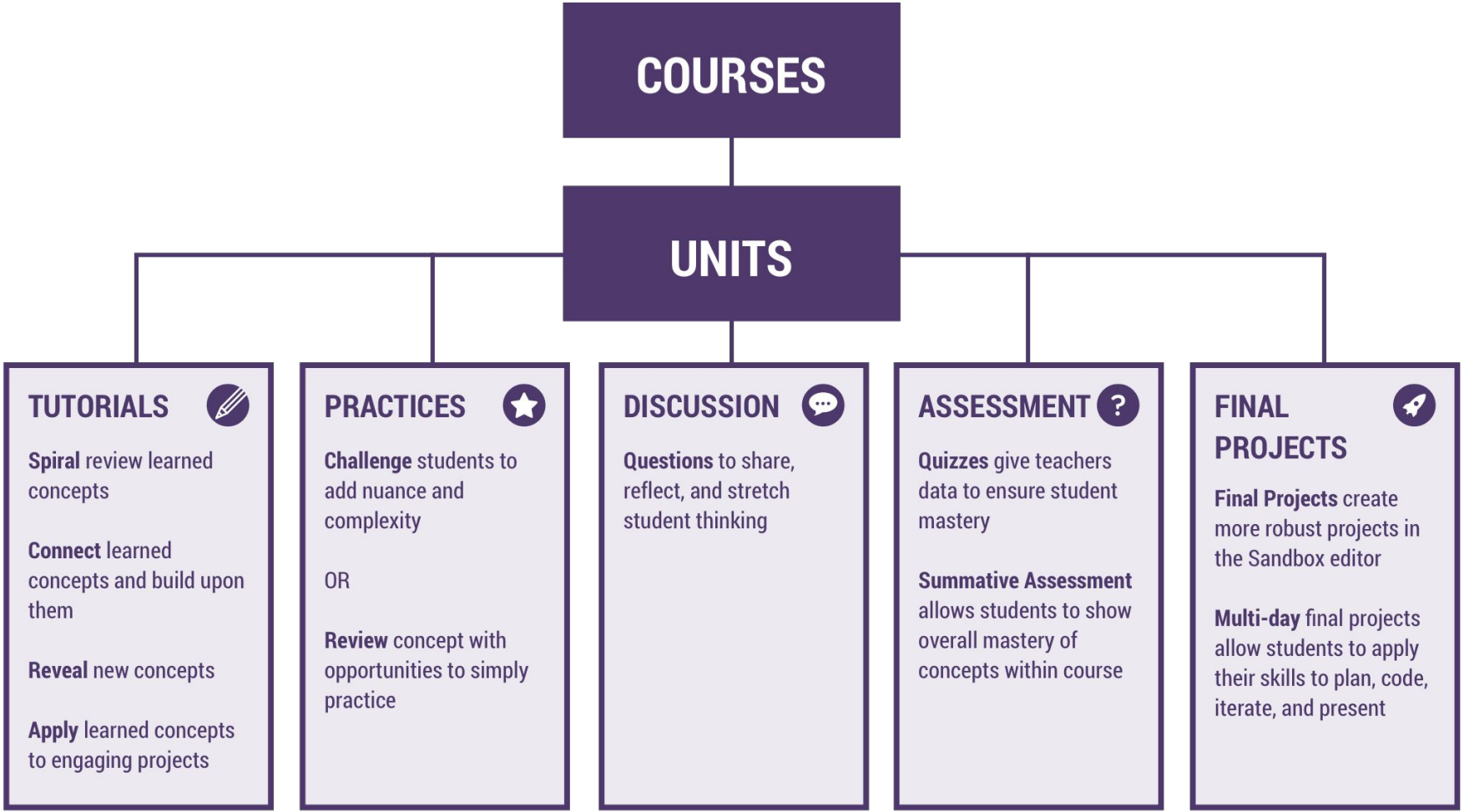
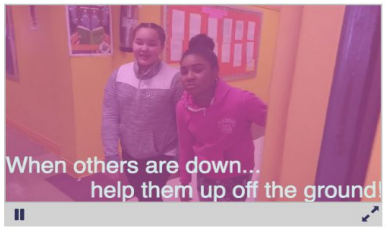

COURSES
UNITS
TUTORIALS
Spiral review learned concepts
Connect learned concepts and build upon them
Reveal new concepts
Apply learned concepts to engaging projects
PRACTICES
Challenge students to add nuance and complexity
OR
Review concept with opportunities to simply practice
DISCUSSION
Questions to share, reflect, and stretch student thinking
ASSESSMENT
Quizzes give teachers data to ensure student mastery
Summative Assessment allows students to show overall mastery of concepts within course
FINAL PROJECTS
Final Projects create more robust projects in the Sandbox editor
Multi-day final projects allow students to apply their skills to plan, code, iterate, and present

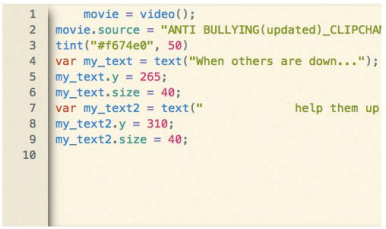
The Impact: Today

- Increasing confidence and abilities in STEM
- Generating positive exposure to computer science
- Transforming perspective and identity

The Stereotypical Newsstory



Anti-Bullying PSA - Jaliz, Yacin, Aliyah, Francheska



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The Impact: Tomorrow

- Every company is becoming a tech company
- Carving professional pathways for all students
- Altering the opportunities for women and POC in technology

Positive Growth in Leadership Competencies

- Problem-solving & compromising
- Observed gains in confidence
- Did not see themselves as role models or change agents initially...

...thought their projects could **teach about identity & assumptions**

Impact

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

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Learning outcomes and engagement

Condition	Beginning of Study	Vidcode course period - *3 weeks*	End of Study
Treatment	- Student pre-assessment	- **Teachers implement Vidcode in the classroom** - Teachers complete weekly logs - Classroom observation	- Student Post-assessment - Teacher Interview
Control	- Student pre-assessment	- Teachers conduct "business as usual activities" - Teachers complete weekly logs - Classroom observation	- Student Post-assessment - Teacher Interview

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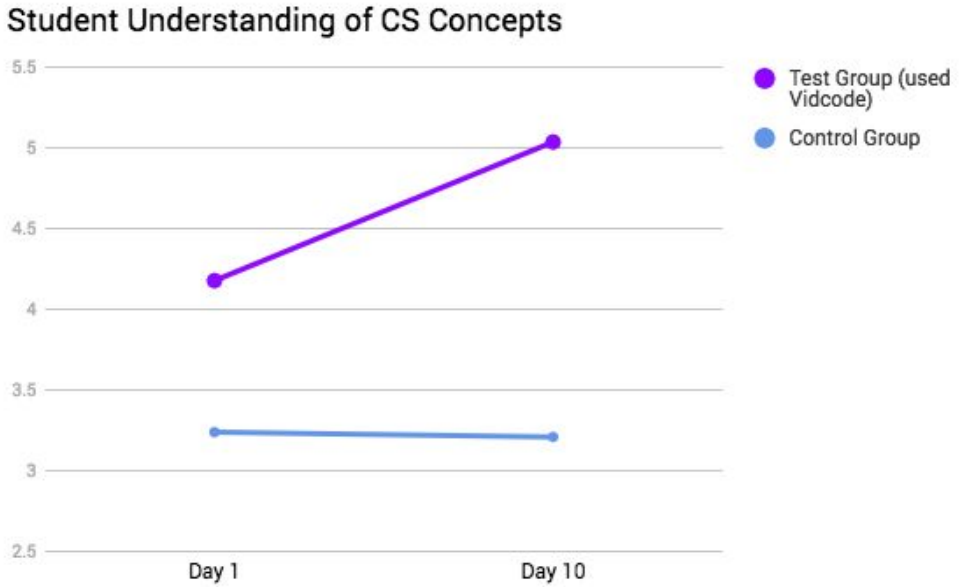
Outcomes



Mindsets for programmers?

Mindsets:

- Growth mindset
- Thoughtfully engage

- This will feel rushed.
- After, create on your own!

What is Vidcode?

Tour platform

Go to:

- My Classes
- Start Coding
- *Create a Filter*

Goal: Make a meme that represents how you feel about coding

Go to:

- My Classes
- Start Coding
- *Make a Meme*

Pair programming

1. Driver - keyboard control
2. Navigator - directions

SWAP

Pair programming

- 6-inch voice
- Only talk to partner
- Compassion

Goal: Make a meme that represents how you feel about coding

SHARE

Goal: Plan a project that ties to your existing Math Curriculum

Collaboration - Your subject area

Choose from **Code the News, Make a Meme or Stop Motion**