

**WELCOME**

**IGNITE TALKS**

**Patty Hicks**



# Girls as Creators



By Patty Hicks  
Computer Teacher  
Gregory Middle School  
Indian Prairie School District #204  
Naperville, Illinois

6<sup>th</sup> and 7<sup>th</sup> grade computer classes are required,  
so the classes are gender-balanced.

8<sup>th</sup> grade is an elective and last year only 21% of  
my students were girls.

The girls prefer the “Mixed Media” class that  
focuses on photography and advertising.

It's even worse at the high school.

Last year only 14% of the AP Computer Science students were girls.

And that's the only computer programming/  
computer science class offered.

Budget cuts led to the elimination of the  
introductory class.

We added a computer programming unit to both the 6<sup>th</sup> and 7<sup>th</sup> grade computer curriculums for the 2011-2012 classes.

This would ensure that every student has the opportunity for computational thinking and problem-solving using a programming language.

Before that only 7% of the school population had any programming experience before entering high school.

I asked my students if they were excited about starting the computer programming unit.



All of the boys thought it sounded fun.

Most of the girls thought it would be boring.

Only the girls who had a parent or family member in the field were excited about programming.



Happily, 90% of the girls really enjoyed  
computer programming.

And that surprised them.

I asked my 7<sup>th</sup> grade students to describe a computer programmer.



“He’s smart, and has a fun job.”



“He’s socially awkward.”

I visited one of the AP Computer Science classes and spoke with the students. There were 3 girls and 21 boys in class.

One girl plans on studying computer science or some form of computer technology in college. Her brother is an electrical engineering major and her dad a computer scientist.

Half of the boys plan on majoring in engineering or computer science in college.

In 2011 “boys dominated” the AP Computer Science class with 80% of the enrollment.

It was 84% boys last year in District 204.

Only 2% of the total high school population took AP Computer Science last year.

Girls in science: Gender gaps still persist in STEM subjects  
*Education Week* Erik W. Robelen, June 27, 2012

That's around 200 students a year out of a total enrollment of 9089 across three high schools.



And 1 girl for every 6 boys.

"Computing has one of the worst gender representations of any STEM discipline. When you do find computing in high school, and it is rigorous, girls are very seldom represented in the classroom."

Lucinda M. Sanders, the chief executive officer and co-founder of the National Center for Women & Information Technology

How do we change the stereotypes?

How do we encourage and support  
students in science, technology,  
engineering and math?

How do we encourage girls to become  
creators?

# Require it.

- Assign them projects that require creativity. Don't tell them what to do or how to do it.
- Give them ownership of the process from start to finish.
- Provide them with the tools to create audio, video, images and anything else they need.



# Encourage risk-taking.

- Push your kids to try something new and different.
- Let them experiment with the language and their ideas.
- Let them fail. Let them think through the logical errors they will encounter.

# Accept the differences.

- Boys and girls are different. Encourage and support their individuality by allowing them to work and think in their own ways.
- But give them opportunities to talk to each other and learn from each other.
- They will learn more and create something even more amazing.

# Be Passionate.

- Don't fake it. If you don't love programming don't lie to your students.
- But do learn to love it. It is fun and engaging and exasperating and ultimately very rewarding.

## Join & Share.

- Join a professional network to learn and share. ScratchED is great for this.
- Reach out to other teachers in your district.
- Share the work product online or in an evening program. We have a STEM night and computer programming is a part of it.

# Collaborate.

- I reached out to the high school AP Computer Science teachers and found two kindred spirits.
- They are going to help build support for computer programming at the middle level by teaching the teachers.
- We are also going to work together to find a way to offer more CS classes at the high school.

# Invite Role Models.

- Invite women in STEM fields to your classroom.
- See if parents would be willing to come and talk to the students about their careers.
- Check with the local colleges for students or professors to help the students with problems.

**Joanne Barrett**

# Getting Computer Science into the Curriculum

Joanne Barrett



Independent K-12 co-ed school in Sarasota, Florida





President, Florida Chapter



Independent K-12 co-ed school in Sarasota, Florida



national center for

women &

INFORMATION  
TECHNOLOGY



ANITA BORG INSTITUTE  
FOR WOMEN AND TECHNOLOGY

## Tapestry Workshop Series

Attracting and engaging diverse high school students to computing

### 2012 Offerings

#### June 26 - 28

University of Virginia  
Charlottesville, VA  
Jim Cohoon and

Joanne Cohoon

#### July 11 - 13

University of Pennsylvania  
Philadelphia, PA

Rita Powell

#### July 18 - 20

North Carolina State  
University  
Raleigh, NC

David Wright and  
Mladen Vouk

#### July 23 - 25

University of Nebraska  
Lincoln, NE

Leen-Kiat Soh and  
Charles Riedesel

#### August 1 - 3

Michigan State University  
and Oakland  
University

East Lansing, MI

Laura Dillon and Fatma  
Milli

#### August 6 - 8

College of Saint  
Scholastica

Duluth, MN

Jennifer Rosato and  
Chery Takkenen

### If you are interested in

- Attracting more and diverse students into your high school Computer Science classes
- Influencing the perceptions of students, parents, guidance counselors, administrators, and other teachers on the importance of your courses and the opportunities they provide
- Engaging your students in the exciting and rewarding field of computing

### You are invited to

- Apply to attend one of six summer workshops on the better attraction and engagement of female students to computer science.

Thanks to the National Science Foundation, NCWIT, CSTA, and university sponsors, the workshops will be tuition-free with lodging and meals provided.

Attendees who complete an entire workshop will be awarded honorariums of \$1,000 to assist with time and travel costs, and to show appreciation for assessing the workshop program and activities.

### What is a Tapestry Workshop?

The goals of the workshop are to share strategies, research-based practices, and field-tested good ideas for teaching computer science in a way that reaches all students regardless of sex or ethnicity.

Workshop participants will

- Explore activities for gaining the interest of all students
- Interact with national experts on teaching and diversity practices
- Meet university faculty desiring to serve as ambassadors to their schools
- Form a network of like-minded people for ongoing discussion and development.

### Application

Interested in applying, applications are being taken now.

### Questions

Questions about individual workshops should be directed to workshop contacts indicated to the left.

If you have questions about the Tapestry Workshops in general please contact Joanne McGrath Cohoon.



## Course Code Directory (CCD) and Instructional Personnel Assignments

*(State Board of Education Rule 6A-1.09441)*

### What is the Course Code Directory (CCD)?

The Course Code Directory (CCD) is a comprehensive information resource consisting of a narrative section that provides general and in-depth information on applicable laws and State Board of Education rules; explanations of requirements and policies pertaining to multiple topics, and details on the K-12 course numbering system. **All programs and courses funded through the Florida Education Finance Program (FEFP) and courses or programs for which students may earn credit toward high school graduation are included in this document.** The CCD assists counselors, students and parents in schedule planning, provides course specific information including course level and length, and lists appropriate teacher certification levels for courses. It allows schools, districts, and the state to identify courses by specific course number, thereby providing analogous information across various levels of administration and consistency in reporting.



ANITA BORG INSTITUTE  
FOR WOMEN AND TECHNOLOGY

# OBSTACLES AND SOLUTIONS FOR UNDERREPRESENTED MINORITIES IN TECHNOLOGY

## **Previous research on barriers faced by underrepresented minorities in technology**

Unequal access to technology and curriculum from early on creates ongoing disadvantage. Starting at the K-12 level, underrepresented students are more likely to be in school districts lacking the resources for a rigorous computer science curriculum.

CAROLINE SIMARD, PH.D.



The majority of Girls Inc. centers are located in low-income areas and provide a weekly average of 30 hours of after-school, weekend and summer activities.

## Girls Only

[Testimonials](#)

[Programs](#)

[Calendar](#)

[What's New](#)

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[Q & A](#)



[Q & A](#)

**girls  
inc.**

Inspiring all girls  
to be strong,  
smart, and bold™



inspiring all girls to be  
**strong, smart and bold!**

**941-366-6646**

Contact Girls Inc. of Sarasota County Today!

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**Philosophy & Mission**

History

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Executive Director

## PHILOSOPHY & MISSION

Girls Incorporated of Sarasota County is a local affiliate of a national nonprofit youth organization dedicated to inspiring all girls to be Strong, Smart, and Bold. Girls Inc. fulfills its mission of empowering girls aged six and up to be self-confident, responsible and well-rounded individuals by delivering research-based, age-appropriate, after-school and summer educational and sports programs designed specifically for girls at the Girls Incorporated National Resource Center.

The primary areas of Girls Inc. programming focus on literacy, math and science, career and life planning, health and sexuality, leadership and community action, sports and adventure, self-reliance and life skills, and culture and heritage. Girls Inc. programs are designed to serve all girls regardless of a girl's socio-economic, ethnic or religious background. Appreciation of diversity and acceptance of others is at the core of the Girls Inc. philosophy. The organization prides itself in offering girls multi-cultural experiences in a safe and harmonious environment. Transportation is provided to girls from the twenty-plus schools to the Girls Inc. facility and sliding-scale scholarships are available for the after-school and summer programs.



# Create a Simple Game in Scratch

Barb Ericson  
Georgia Tech

June 2009

```
when green flag clicked
  set score to 0
  set missed balls to 0
  go to x: 53 y: 176
  forever loop
    if touching Sprite1
      change score by 1
      go to x: pick random -235 to 235 y: 180
    change y by 5
    if score = 5
      broadcast winner
    if touching Sprite5
      change missed balls by 1
      go to x: pick random -235 to 235 y: 180
    if missed balls = 2
      broadcast loser
```

[\[PPT\] Creating a Simple Game in Scratch](#)

[coweb.cc.gatech.edu/ice-gt/uploads/446/BabyCatch-6-4-2009.ppt](http://coweb.cc.gatech.edu/ice-gt/uploads/446/BabyCatch-6-4-2009.ppt)

File Format: Microsoft Powerpoint - [Quick View](#)

Jun 4, 2009 – Create a Simple **Game** in **Scratch**. **Barb Ericson**. Georgia Tech. June 2009. Goals. Learn about. event handling; simple sequential execution ...

## Scratch Activities Version 1.0



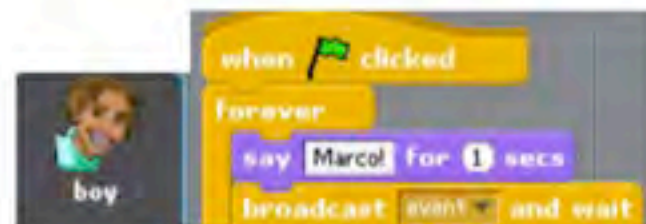
by  
Richard Wiktorowicz  
Moorefield Girls High

[richard\\_wiktorowicz@yahoo.com.au](mailto:richard_wiktorowicz@yahoo.com.au)

5. This script alternates costumes and sounds. Modify so that your script in 4 (above) also changes costume as well as sound.



6. Here is a script with two Sprites one that says "Marco" the other one "Polo". Modify it to a cat with a "meow" and a dog with a "bark" counting.



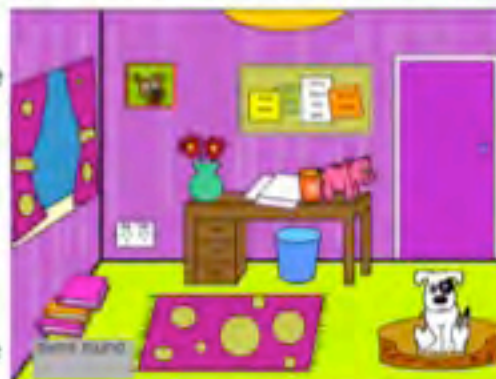




## MAKE AN ESCAPE THE ROOM GAME IN SCRATCH

In this tutorial, you will learn how to create an *Escape the Room* game in *Scratch*. An *Escape the Room* game is one where the player finds themselves locked in a mysterious room. They must then explore the room to locate objects that will enable them to escape the room.

The *Escape the Room* game genre was made popular by the Japanese game *Crimson Room* that was released on the internet in 2004. This game is available on the internet and can be quite challenging to play.



This tutorial will show you how to create a simplified version of this type of game. You will create a collection of objects that can be moved throughout the room and will hide objects in different locations within the room. Once you have collected the three objects, you will be able to escape the room through the door. On completion of this tutorial, you will have learnt how to:

- use the *Scratch* drawing tools
- create Sprites
- use some of the *Scratch* scripting commands
- use variables in *Scratch*
- create multiple scenes by giving the stage multiple backgrounds.

Whilst the game we will build is quite simple, once you have developed these skills, you'll be able to extend the game or create other games with more complexity. You can also use these skills to create adventure games with multiple rooms and locations. You could also enhance your game by building in an interesting narrative, adding sound or using more intricate or detailed graphics. An example of the game you will create is located on the *Scratch* website at <http://scratch.mit.edu/projects/ellieelectrons/1198599>.

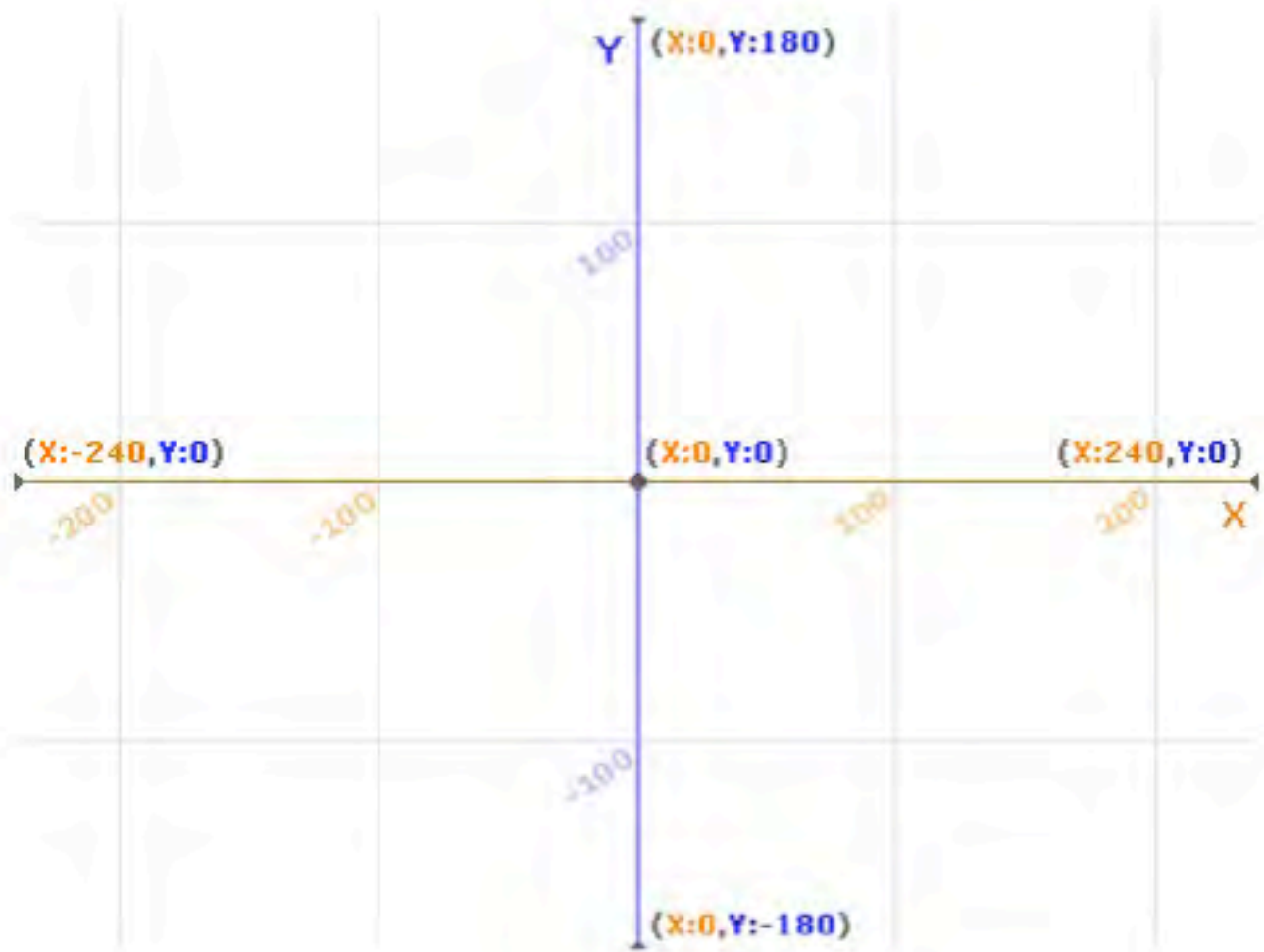
<http://scratched.media.mit.edu/sites/default/files/pdf-escape-the-room-scratch-draggable-using-lock-button.pdf>





INSPIRING ALL GIRLS  
TO BE





- Control
- Sensing
- Operators
- Variables

10 steps

15 degrees

15 degrees

direction 90

upwards

-175 y: 8

secs to x: -175 y: 8

x by 10

to 0

y by 10

to 0

edge, bounce

position

position

direction

**Rainbow** x: -175 y: 8 direction: 90

Scripts

when right arrow key pressed  
move 10 steps

when left arrow key pressed  
move 10 steps

when 10 key pressed  
switch to costume gobo2  
wait 2 secs  
switch to costume gobo3  
wait 2 secs  
switch to costume gobo4  
wait 2 secs  
switch to costume gobo5  
wait 2 secs  
switch to costume gobo6

mayaperez

score 22

lives 5

New sprite:

Rainbow cloud 1 line

line (Scripts: 0)

Stage

Sprite2



x: -152 y: 91 direction: 90

Costumes

Sounds

abbyqwertyulopa dfghjklzxcv vvvvvvbbbbbnnnnnnn...



x: -46 y: -155

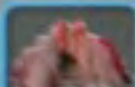
New sprite:



Background



Sprite 1



Sprite 2



Sprite 3



Sprite 4



Sprite 5



Sprite 6



Sprite 7



Sprite 8



Sprite 9



Sprite 10





## Can We Fix Computer Science Education in America?

by KEITH WAGSTAFF • JULY 16, 2012

 READ LATER



<http://techland.time.com/2012/07/16/can-we-fix-computer-science-education-in-america/>

Stories

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Explore Resources

## Explore Resources

Found 437 Resources



### K-8 Computer Science: Building a Solid Foundation

Contributed by Patrice Gans, July 19, 2012

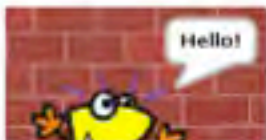
It provides a review of current thought on K-8 CS education, explores how CS topics and concepts can impact learning the K-8 classroom, and offers practical strategies and resources.

**Content Types:** Reference Guide

**Education Level:** Elementary School

**Curricular Areas:** Computer Science

1 Comment 2 Bookmarks



### Intermediate Level Loops and Event Recognition

Contributed by K Rusniak, July 17, 2012

Fun experimentation with loops and event recognition to control and manipulate a character. Good for kids of all ages over seven.

### Search Resources

#### Education Level

Preschool and Kindergarten (208)

Elementary School (314)

Middle School (278)

High School (254)

College and University (266)

Professional Development (295)

Other (220)

#### Content type

Activity (230)

Advocacy Material (43)

Assessment (65)

Audio and Video (110)

Curriculum (69)

Handout (140)

Lesson Plan (113)

Presentation (58)

Reference Guide (27)

Research (50)

Sample Scratch Project (159)

Textbook (13)

Tool (33)

Tutorial (108)

GIRLS!

## Conclusion:

Volunteering with Scratch - Turns out to be a great opportunity to bring computer science education to the underrepresented populations!

**Ryan Evans**

# WHY DO I HAVE TO LEARN THAT???



## SCRATCHING

## TO MAKE LEARNING RELEVANT



Ryan F. Evans

Technology Teacher

Wanaque Borough Public Schools

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# Why Do I Have to Learn That???








# Relevant




- ◆ Definition
  - bearing upon or connected with the matter in hand; pertinent:
- ◆ Synonyms
  - applicable, germane, apposite, appropriate, suitable, fitting.
- Source: Dictionary.com

# Create Connections

What	Why
<b>Applicable:</b> 	Projects can be integrated into all subject areas and applied to real world issues.
<b>Germane:</b> 	Projects created can closely relate to children's interest, subject area lessons, and personal life experiences.
<b>Appropriate:</b> 	Created for children from the elementary – high school ages; however used by people younger & older.



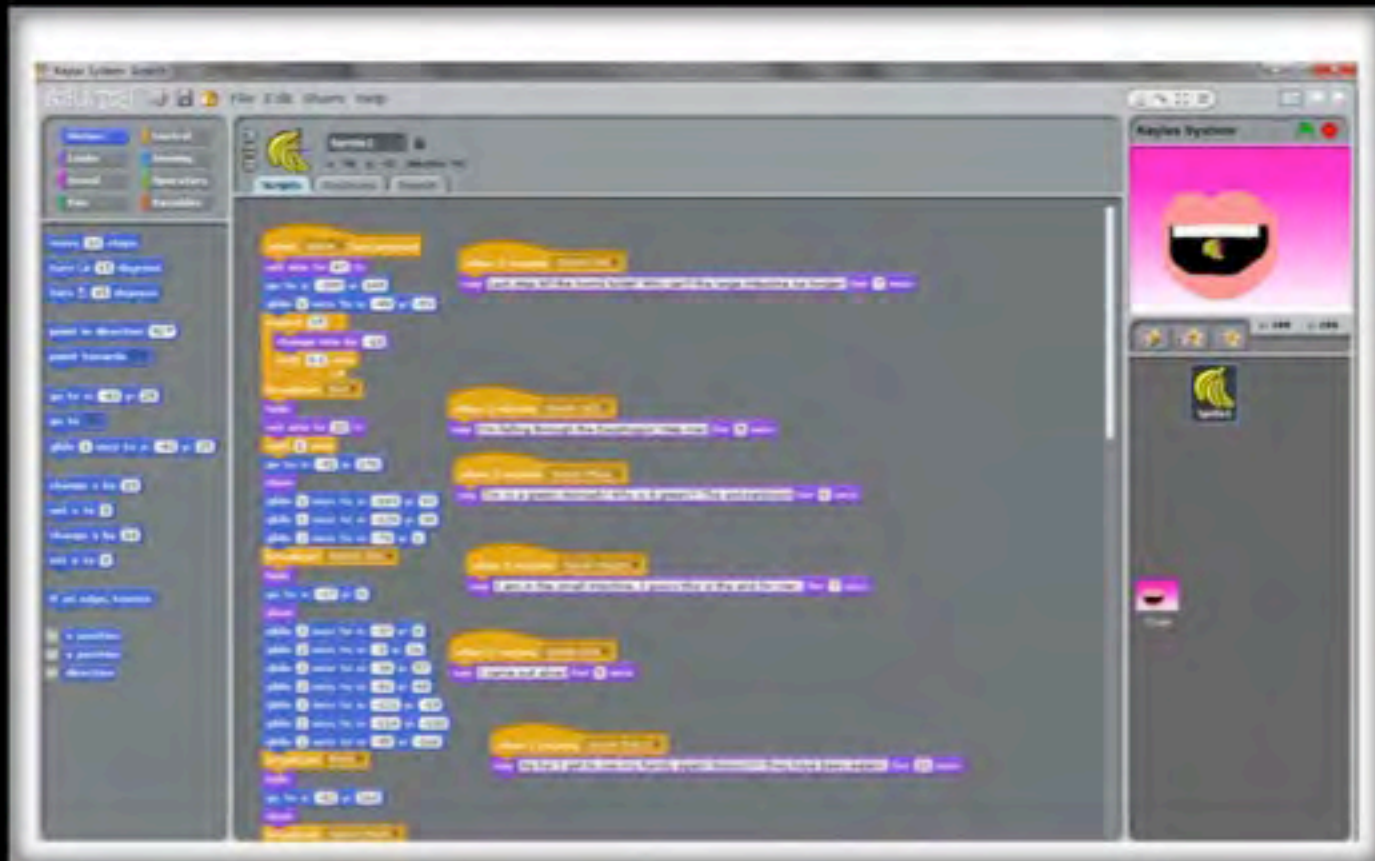
# Connected With:

Grade	Description / Connection
4 	Study of the digestive system
5 	Study of the mission of the Space Shuttle Challenger (Halley's Comet)
7 	Creation of a Public Service Announcement along with online discussions

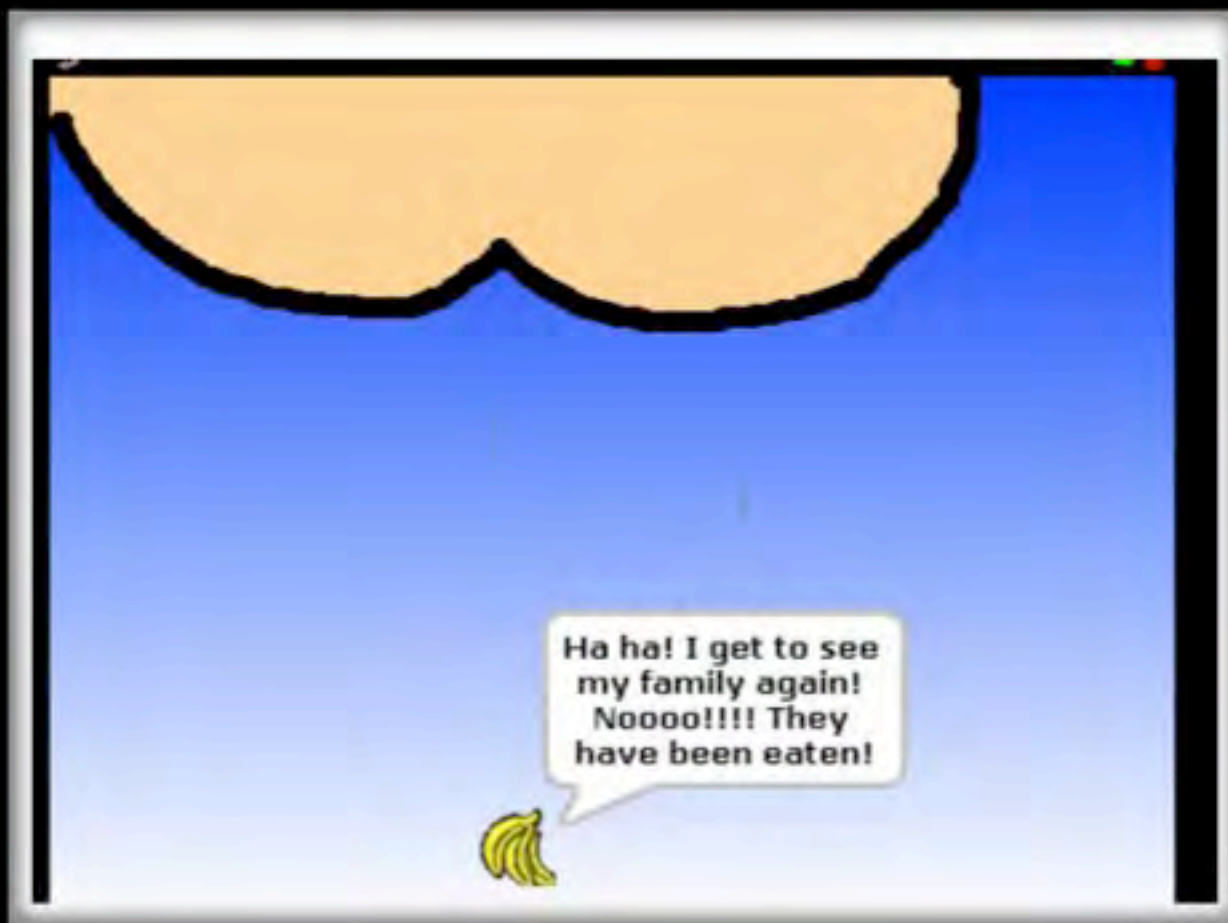
# A Digestion Connection – Grade 4



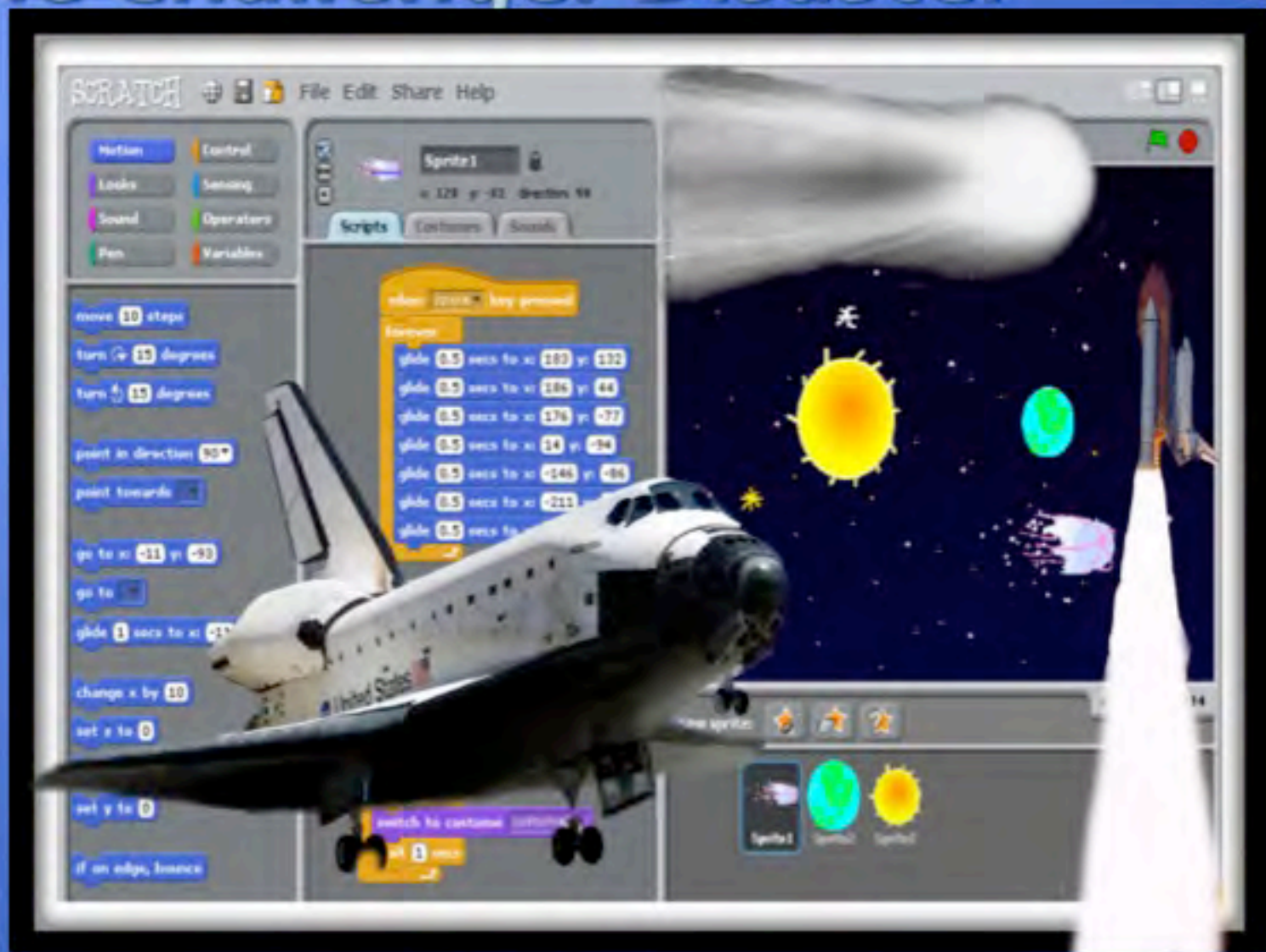
# More Than Digestion



# What Goes In...Must Come Out



# The Challenger Disaster



# Continuing the Mission – Grade 5

The image shows a screenshot of a Scratch project page. At the top, a banner reads "BUEHLER CHALLENGER & SCIENCE CENTER". Below this is the Scratch logo and navigation links: "Home projects gallery support forum about my stuff". A user is logged in as "techdude221" with a "Logout" link. A message notification says "You have 212 messages".

The main content area features a project titled "BC Comet 2012". The project preview shows a space scene with a blue and green Earth, a black space shuttle, and a pink comet with a green nucleus. To the right of the preview, there are sections for "Download this project!", "Want to s...", "Project Notes", and "Tags".

The "Project Notes" section contains the following text: "This comet animation was created by a fifth grade student (BC) as part of our research and study of the 1986 Space Shuttle Challenger disaster. Press Space Bar to begin."

The "Tags" section includes the tag "animation" and "space".

An overlay of the Scratch script editor is positioned on the right side of the page. It shows a "when green flag clicked" event block followed by a series of "say" blocks. Each "say" block is configured with "say for 2.00 seconds" and "say in direction" set to "down".

# Connecting with Space & More

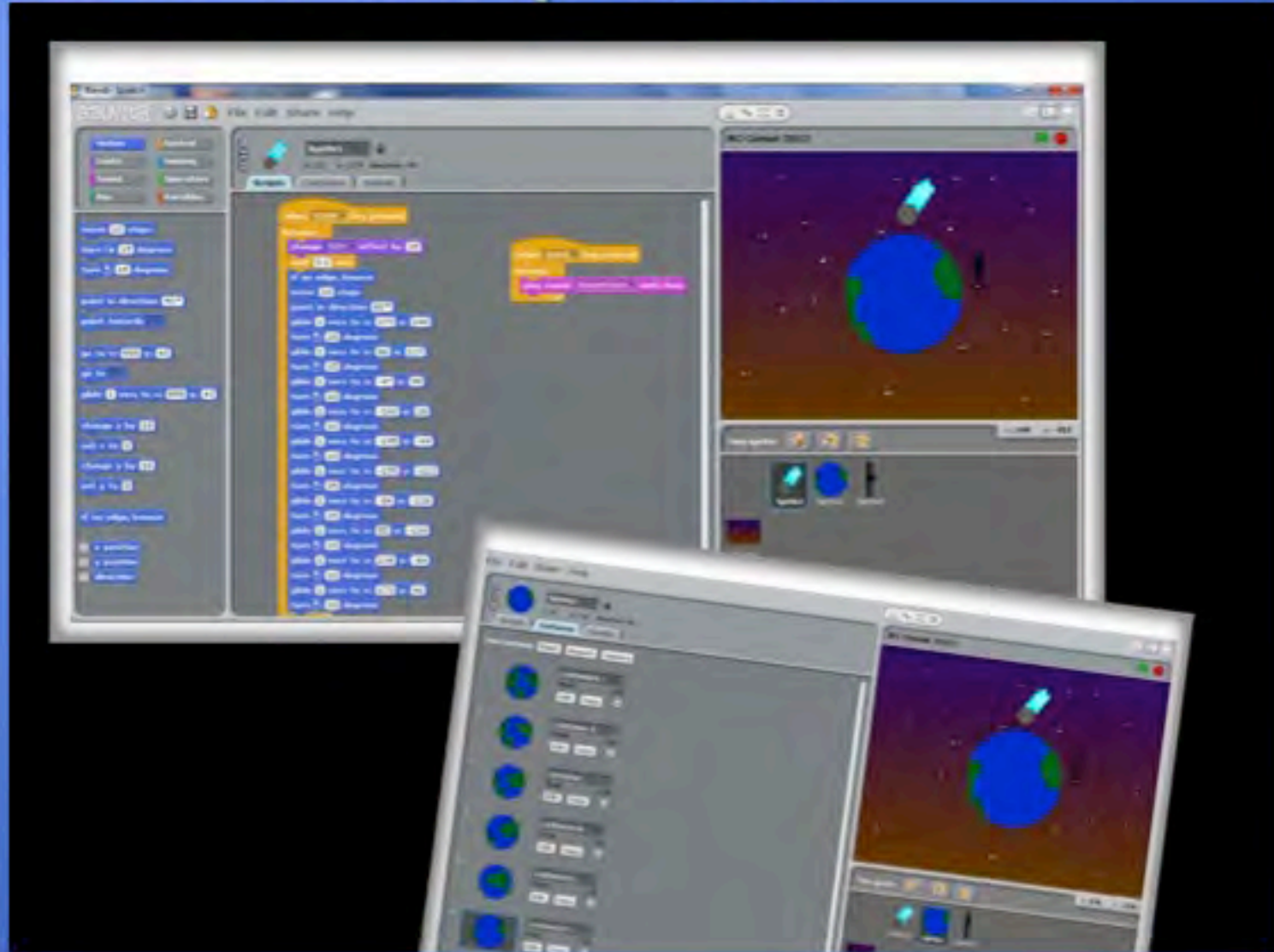
The image shows a screenshot of the Scratch website interface. At the top left is the Scratch logo with the tagline "Imagine • program • share". To the right are navigation links: "home", "projects", "galleries", "support", "forums", and "about". Below the navigation is a user greeting: "Welcome, [techdude221](#) | [Logout](#)". A message notification says "You have 212 messages".

The main content area features a project titled "BC Comet 2012". The project preview shows a blue and green Earth with a pink and white comet streaking across a dark purple space background. To the right of the preview, there is a "project!" section with the text: "Download the 3 sprites and 4 scripts of 'BC Comet 2012' and open it in [Scratch](#)". Below this is a "Want to switch back?" section with the text: "Click [here](#) to switch back to the default Java player. Please [let us know](#) what you think of the new Flash player."

At the bottom right, there is a "Project Notes" section. The text reads: "This comet animation was created by a fifth grade student (BC) as part of our research and study of the 1986 Space Shuttle Challenger disaster. Press Space bar to begin".

Overlaid on the bottom right of the main screenshot is a smaller, tilted version of the same Scratch project page, showing the same "BC Comet 2012" project preview and notes.

# Rendezvous with Comet Halley: Mission Accomplished





# Scratch PSA – Grade 7

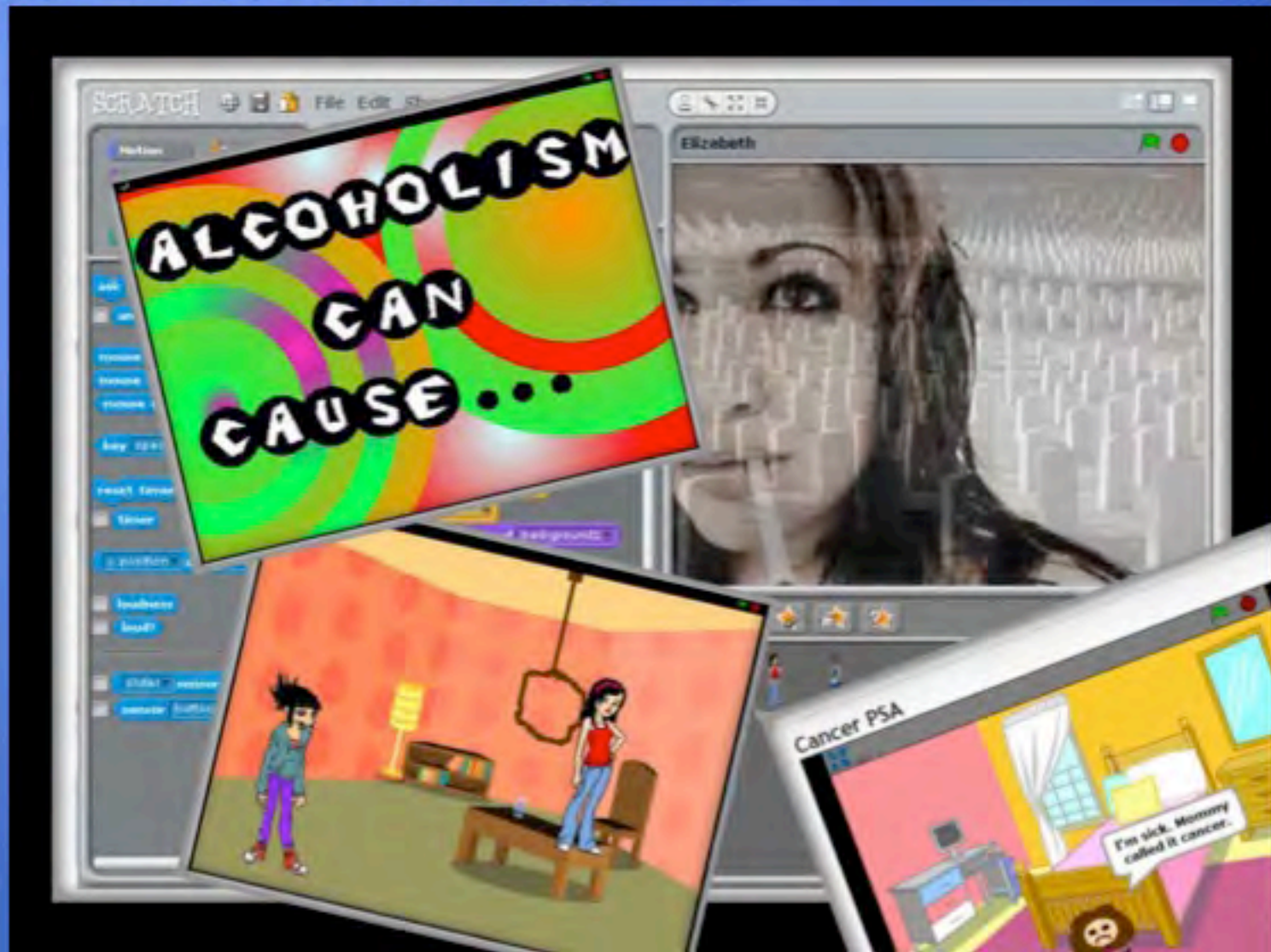
The screenshot shows a Scratch project page. At the top left is the Scratch logo with the tagline "imagine • program • share". To the right is a navigation menu with links for "home", "projects", "galleries", "support", "forums", "about", and "my stuff". A "Language" dropdown menu is also visible. Below the navigation is a welcome message: "Welcome, [techdude221](#) | [Logout](#)". A search bar is located to the right of the welcome message. A notification bar indicates "You have 212 messages".

The main content area features a project titled "Cancer PSA". The project's stage is a black rectangle with white text that reads: "Help find this cure! Help save children like Lily! Their waiting on you to help them! So please, just try to help find the cure for cancer. In any way you can!".

To the right of the project stage are several informational boxes:

- Download this project!**: A box with a "Download" icon and a "1.4" version number. The text below says: "Download the one sprite and 2 scripts of 'Cancer PSA' and open it in Scratch."
- Want to switch back?**: A box with a "Switch" icon. The text below says: "Click [here](#) to switch back to the default Java player. Please [let us know](#) what you think of the new Flash player."
- Project Notes**: A box with a "Notes" icon. The text below says: "The project topic is very important to me for it has affected my family in many ways. My little sister was diagnosed with cancer when she was younger. Ever since then, the disease has had an important place in my life. To start the project, press the SPACE bar key."

# Real World Issues



# A Story About My Sister

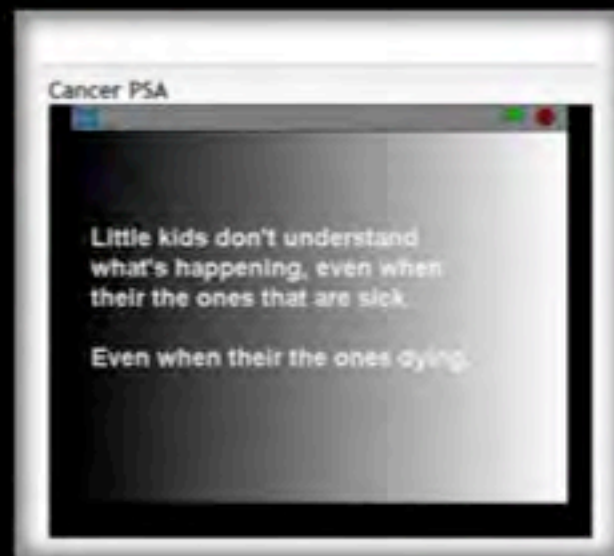
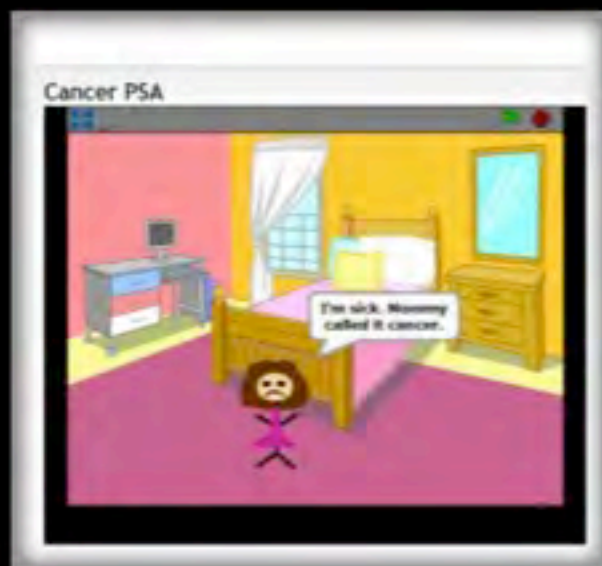
All over the world...

Everyday...

Children become sick with  
cancer...



# A Family's Personal Feelings



# 21<sup>st</sup> Century Learning

The screenshot shows a Scratch project page. At the top left is the Scratch logo with the tagline "imagine • program • share". To the right are navigation links: "home", "projects", "galleries", "support", "forums", "about", "my stuff", and a "Language" dropdown. Below this is a user greeting: "Welcome, **techdule221** | [Logout](#)". A search bar is also present. A notification bar says "You have 212 messages".

The main content area features a project titled "Cancer PSA". The project preview shows a character on a cloud with a speech bubble containing the text: "I learned something. Sometimes, mommy lies. If everything was okay, then why is she still crying? Why is daddy and grandma still crying?!"

On the right side, there are three sections:

- Download this project!**: Includes a "Download" button and a "1.4" rating. Text: "Download the one sprite and 2 scripts of 'Cancer PSA' and open it in Scratch."
- Want to switch back?**: Text: "Click [here](#) to switch back to the default Java player. Please [let us know](#) what you think of the new Flash player."
- Project Notes**: Text: "The project topic is very important to me for it has affected my family in many ways. My little sister was diagnosed with cancer when she was younger. Ever since then, the disease has had an important place in my life. To start the project, press the SPACE bar key."

# Online Discussions / Netiquette



SavannahGoes! shared it 2 months, 1 week ago

3 views, 2 people love it, 2 downloads, in 1 gallery

Love it! Add to my favorites! Flag as inappropriate!  
Add to a gallery

Comments

Add a Comment

0/500

Add

iffers 2 months ago

This has got to be the best Scratch project I've ever seen. I know what it feels like to be in Lyla's situation because my mom, too, had cancer. She didn't die from it and I'm lucky for that.

Like SavannahGoes!

leathermole429 2 months ago

Wow this is really good! The details were great! I noticed how she started to lose her hair - this is a really good way to express this pain.

about project:

Project Notes

The project topic is very important to me for it has affected my family in many ways. My little sister was diagnosed with cancer when she was younger. Ever since then, the disease has had an important place in my life. To start the project, press the SPACE bar key.

Tags

Add Tags

Done

Link to this Project

Embed

Embed

More Projects by SavannahGoes!vrr

ms\_statis 2 months ago

This is by far the best scratch project I've ever seen. I kept staring up when I saw it. The storyline was perfect and I noticed how she was gradually losing her hair. Everything was perfect Great job!

Like SavannahGoes!

leathermole429 2 months ago

I really love this how the girl was told everyone not to cry anymore.

Like SavannahGoes!

zinkster123 2 months ago

This is a really nice project. Its nice that you chose to do this project about cancer because you have lived with this real life experience.

Like SavannahGoes!

leathermole429 2 months ago

also job cancer is a serious situation and this video is very cute :)

Like SavannahGoes!

carlylou2009 2 months ago

Really good. It definitely proved the point, cancer is a huge problem that needs a cure.

Like SavannahGoes!

# Scratching to Make Learning Relevant



# Credits

- Bored Students in Lecture Hall . (2009). Image. Retrieved July 11, 2012, from MicrosoftOffice.com: <http://office.microsoft.com/en-us/images/results.aspx?qu=students&ctt=1#ai:MP900443256|mt:0>
- DUCKofD3ATH on Flickr. (2007). Image. Atlantis Comes Home. Retrieved July 12, 2012 from Fotopedia.com: <http://fr.fotopedia.com/items/flickr-626754359>
- NASA Goddard Photo and Video on Flickr. (2011). Image. Space Shuttle Discovery STS-133 . Retrieved July 12, 2012 from Fotopedia.com: <http://www.fotopedia.com/items/flickr-5477483526>
- relevant. (n.d.). *Dictionary.com Unabridged*. Retrieved July 11, 2012, from Dictionary.com website: <http://dictionary.reference.com/browse/relevant>
- Teacher in a school pointing to the blackboard. (n.d.). Image. Retrieved July 11, 2012 from Microsoft Office.com: <http://office.microsoft.com/en-us/images/results.aspx?ex=2&qu=blackboard#ai:MC900295477|mt:0>
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**Barb Manchee**

# *Pittsford* *Summer Enrichment*



*2011 Course Brochure*



**Creative Thinking through  
Game Design and  
Multimedia**

“Would you like to design your own game, create your own animation and multimedia project? Using an easy programming language developed by MIT, you can learn about game design, programming, creative thinking and you can have fun!”

*2011 Course Brochure*

# Goal



# Objectives

Students will

1.)

## PROGRAMMING CONCEPTS AND SKILLS SUPPORTED IN

In the process of creating interactive stories, games, and animations with Scratch, young people can learn important computational skills and concepts.


### PROBLEM-SOLVING AND PROJECT-DESIGN SKILLS

- logical reasoning
- debugging problems
- developing ideas from initial conception to completed project
- sustained focus and perseverance

### FUNDAMENTAL IDEAS ABOUT COMPUTERS AND PROGRAMMING

- Computer programs tell the computer precisely what to do, step-by-step
- Writing computer programs doesn't require special expertise, just clear and careful thinking

### SPECIFIC PROGRAMMING CONCEPTS

Concept	Explanation	Example
sequence	To create a program in Scratch, you need to think systematically about the order of steps.	

2.)









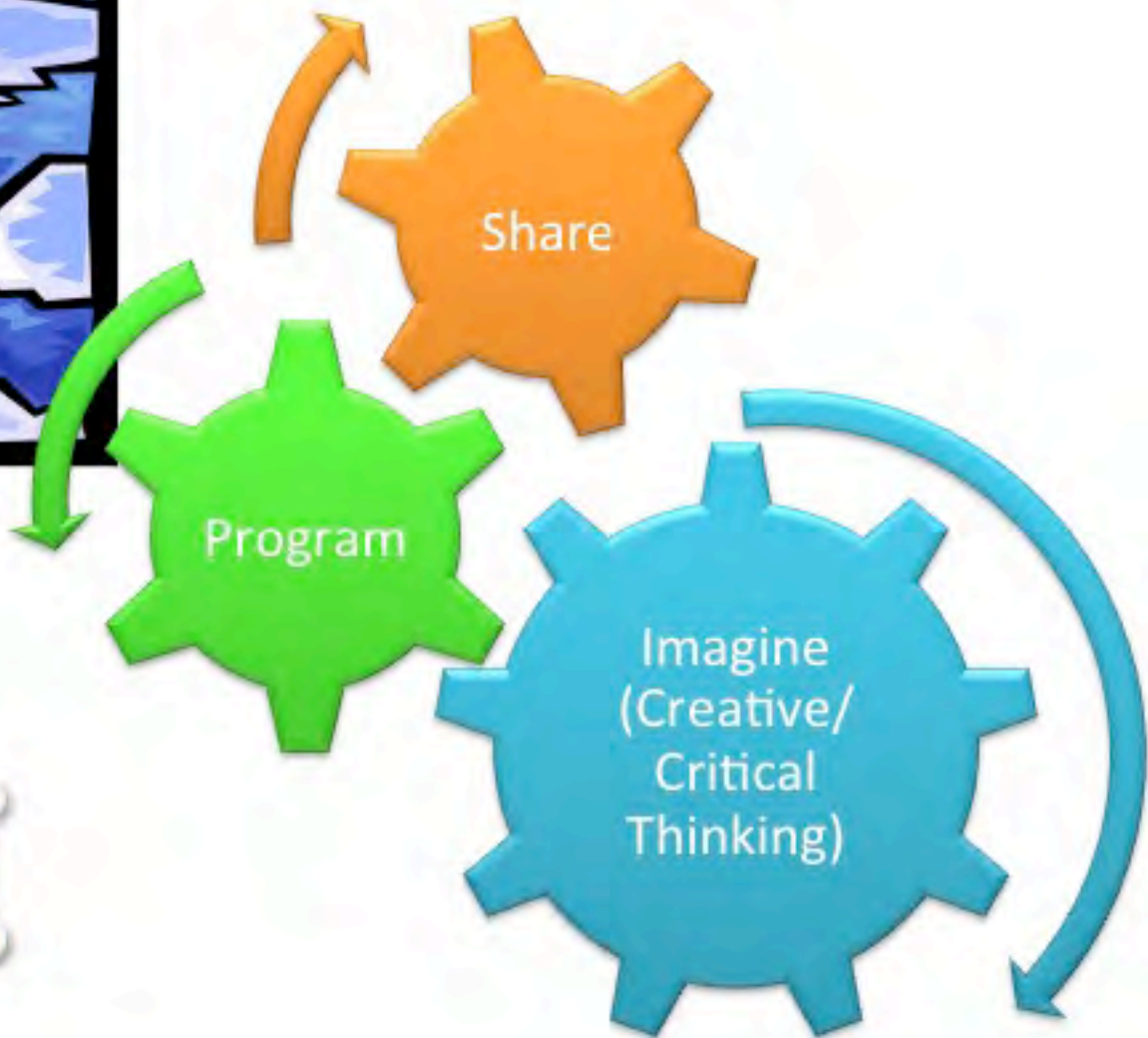
Flipped



[www.pittsfordschools.org/webpages/bmanchee](http://www.pittsfordschools.org/webpages/bmanchee)

[www.pittsfordschools.org/webpages/enatoli](http://www.pittsfordschools.org/webpages/enatoli)





# SCRATCH

imagine • program • share

# www.animationish.com/lessons.php



## Animation-ish™

MAKE YOUR MARK...MOVE!



Home

About

FAQ

Lessons

Curriculum

Community

COMING SOON

### Lesson 1: Make a doodle



Welcome guest! The following lessons are available to view. Have fun playing!



### Lessons: Animation (12)



#### Lesson1: Make a doodle

Learn how to use the first level of Animation-ish with a special demonstration by Peter H Reynolds.

Time: 5:02 Level: Wiggledoodle-ish



#### Lesson2: Flipbook-ish

Peter and company explore the second level of Animation-ish by making a flower grow.

Time: 5:32 Level: Flipbook-ish



#### Lesson3: Advanced-ish (Part 1)

The third level of Animation-ish is demonstrated when Pete draws an alien in a spaceship.

Time: 4:36 Level: Advanced-ish

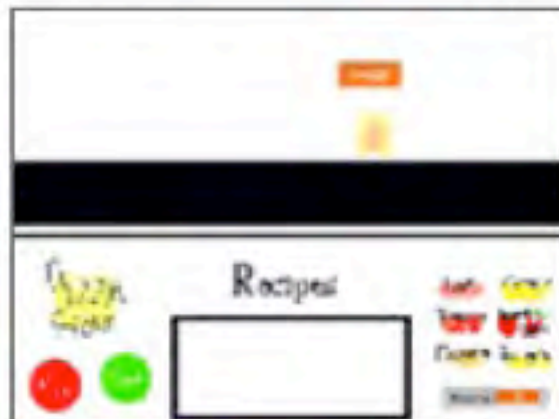


#### Lesson4: Advanced-ish (Part 2)

### Summary:

Join Peter H. Reynolds and the animators of FableVision as they explore the features of the first level of Animation-ish, "Wiggledoodle-ish." Peter shows how easy it is to bring a doodle to life by tracing over it 3 times to

## Rm224's Favorites



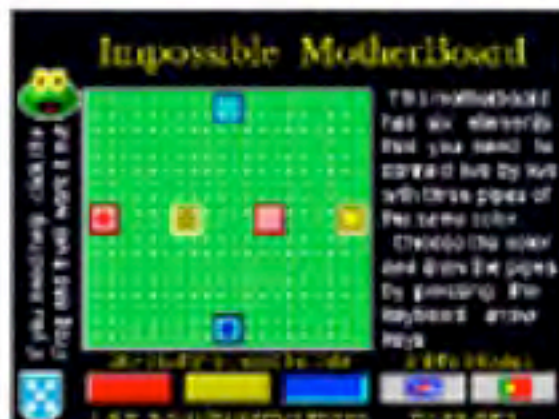
[Pizza -beta](#)

by [Llamalover](#)



[Fighting Bees](#)

by [BoltBait](#)



[Impossible Mother...](#)

by [ffred](#)



[Photopuzzle](#)

by [goch](#)



### Change Color



### Move to a Beat



### Key Moves



### Say Something



### Glide



### Follow the Mouse



### Dance Twist



### Interactive Whirl



### Animate It









Strong  
National  
Museum  
of  
PLAY

**GREENEBAUM, SAIGER,  
& KASDIN, P.C.**

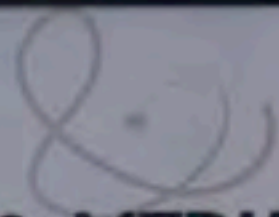
Certified Public Accountants

**Second Avenue  
Software, Inc.**

**TOBEY VILLAGE  
OFFICE PARK**

**BLDG. 190**

# SCHOOL OF INFORMATICS



## SCHOOL OF INTERACTIVE GAMES & MEDIA



2670 . . . Sol Open Lab

IGM open lab . . . 2000



2400 . . . . . Conference Room

Sol Student Services & Advising . . 2120



2410 . . . . . Security Lab

School of Informatics Office . . . 2100



2500 . . . . . Breakout Room

Interactive Games &



2509-2599 . . . Multimedia Labs

Media Office . . . . . 2145



2600-2690 . . . Database Labs

Networking Labs . . . . . 2130-2293



2647 . . . . . Medical Informatics



PITTSFORD FARMS  
DAIRY



PITTSFORD FARMS  
DAIRY



PITTSFORD FARMS  
DAIRY

**Janet Dee**

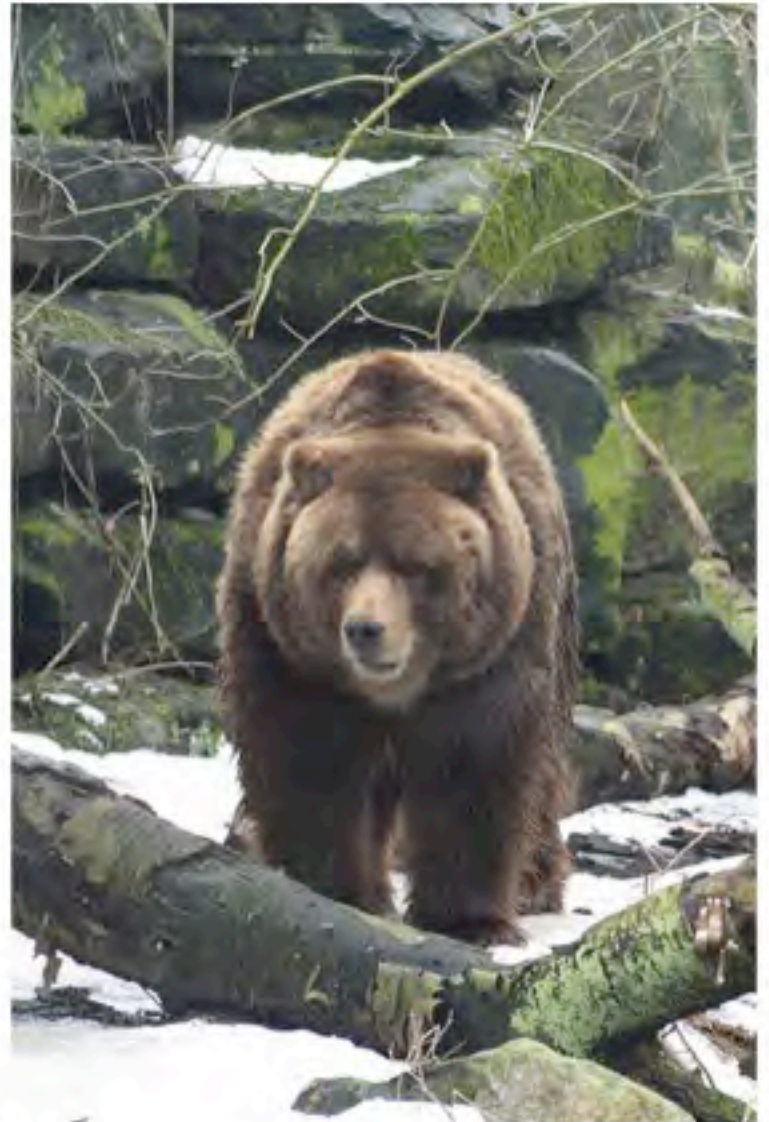
# Oh the Presentation Possibilities!

## SCRATCH

Janet Dee  
Reading Memorial High School  
Reading, MA  
With Special Thanks to  
Ms. Dymont and her ninth grade  
advisory students



**Present to  
whom?**



**Groan!**



**“About me”... in ninth grade?**



“Show me  
the  
template!”

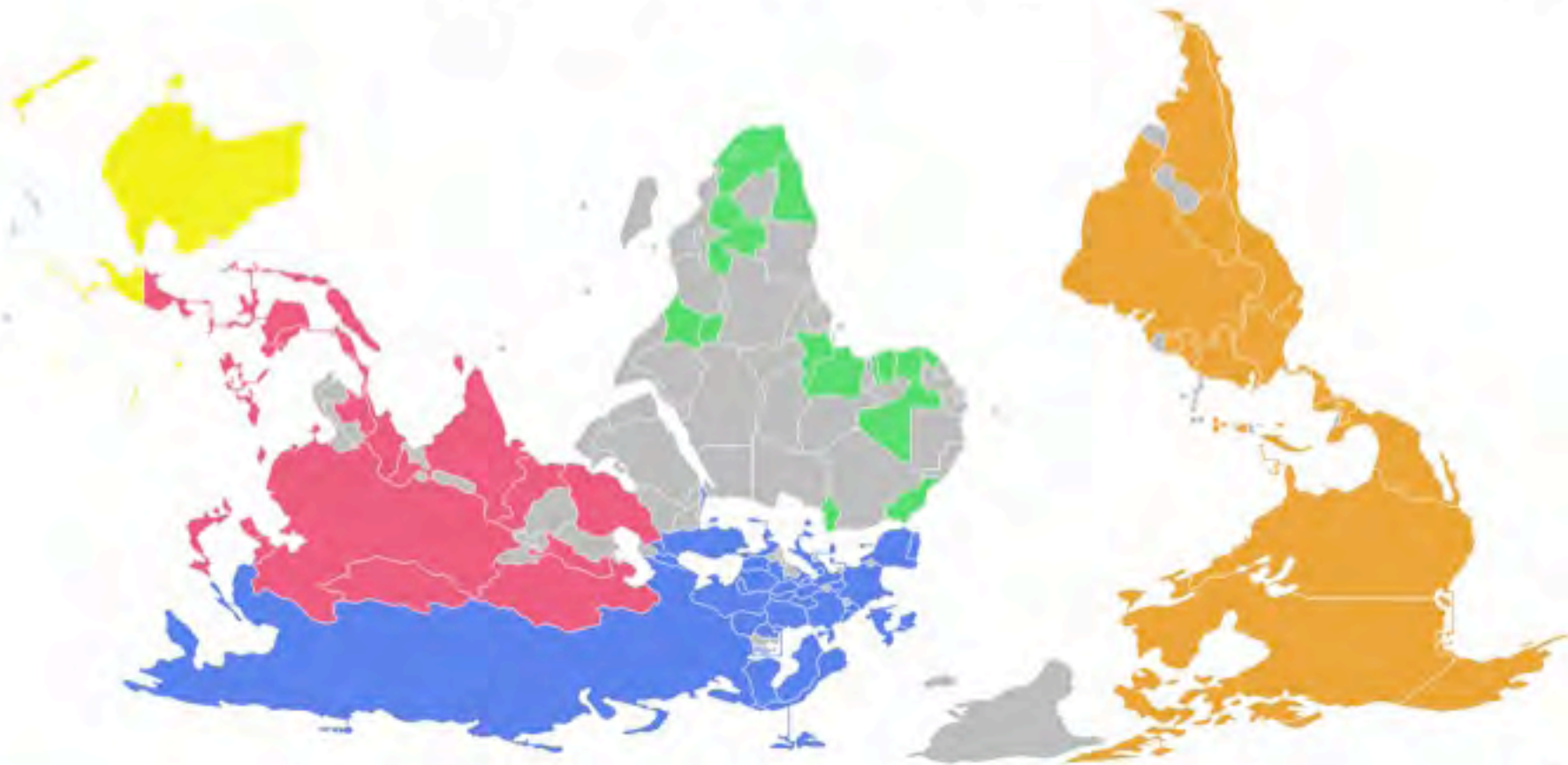


**"One of the great tragedies of the current computer revolution is the widespread expectation that every piece of software should be easy to use." -John Sviokla**

**Harvard Business Review,  
May 8, 2009**



# Turn their world upside down?

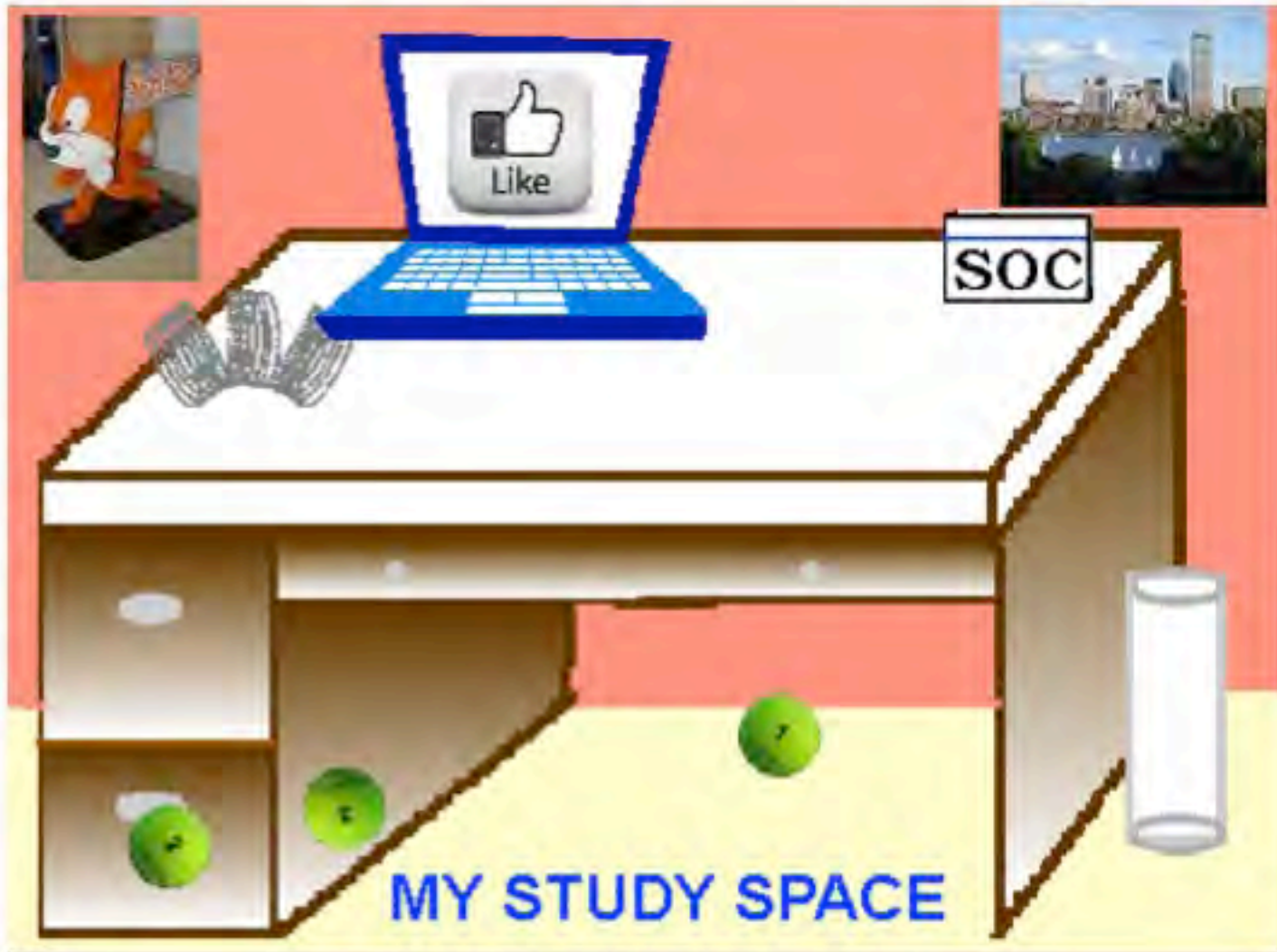


**Better  
yet,  
tilt it -  
just enough...**



# Step 1: Model my finished sample

**Chaos  
meets  
calm  
in a  
tactile  
world**



# Step 2: Reveal the workspace

The image shows a Scratch workspace titled "My\_study\_space[1] - Scratch". The interface includes a menu bar (File, Edit, Share, Help), a toolbar, and a sidebar with various tool categories: Motion, Control, Looks, Sprites, Sound, Operators, Pen, and Variables. The main workspace is divided into three sections:

- Scripts:** Contains a "when green flag clicked" event block followed by a "clear" block, a "go to x: 250 y: 100" block, and an "if on edge, bounce" block.
- Looks:** Contains a "when green flag clicked" event block followed by a "clear" block, a "go to x: 250 y: 100" block, a "repeat" loop (10 times) containing "stamp", "change x by 10", "change y by 10", "go back 5 layers", and "wait 0.001 secs", and a "change ghost effect by 10" block.
- Stage:** Displays a 3D desk scene titled "MY STUDY SPACE". The desk is white with a blue laptop on top. The laptop screen shows a "Like" button. A sign on the desk says "SOC". A small figure of Jerry the mouse is on the left, and a stack of three green apples is on the right. The background is a light blue sky with a cityscape. The stage has a yellow floor and a light blue wall.

# Step 3: Inspire with just one idea



**Animate  
the  
background  
object**





# Ready, Set, Reflect

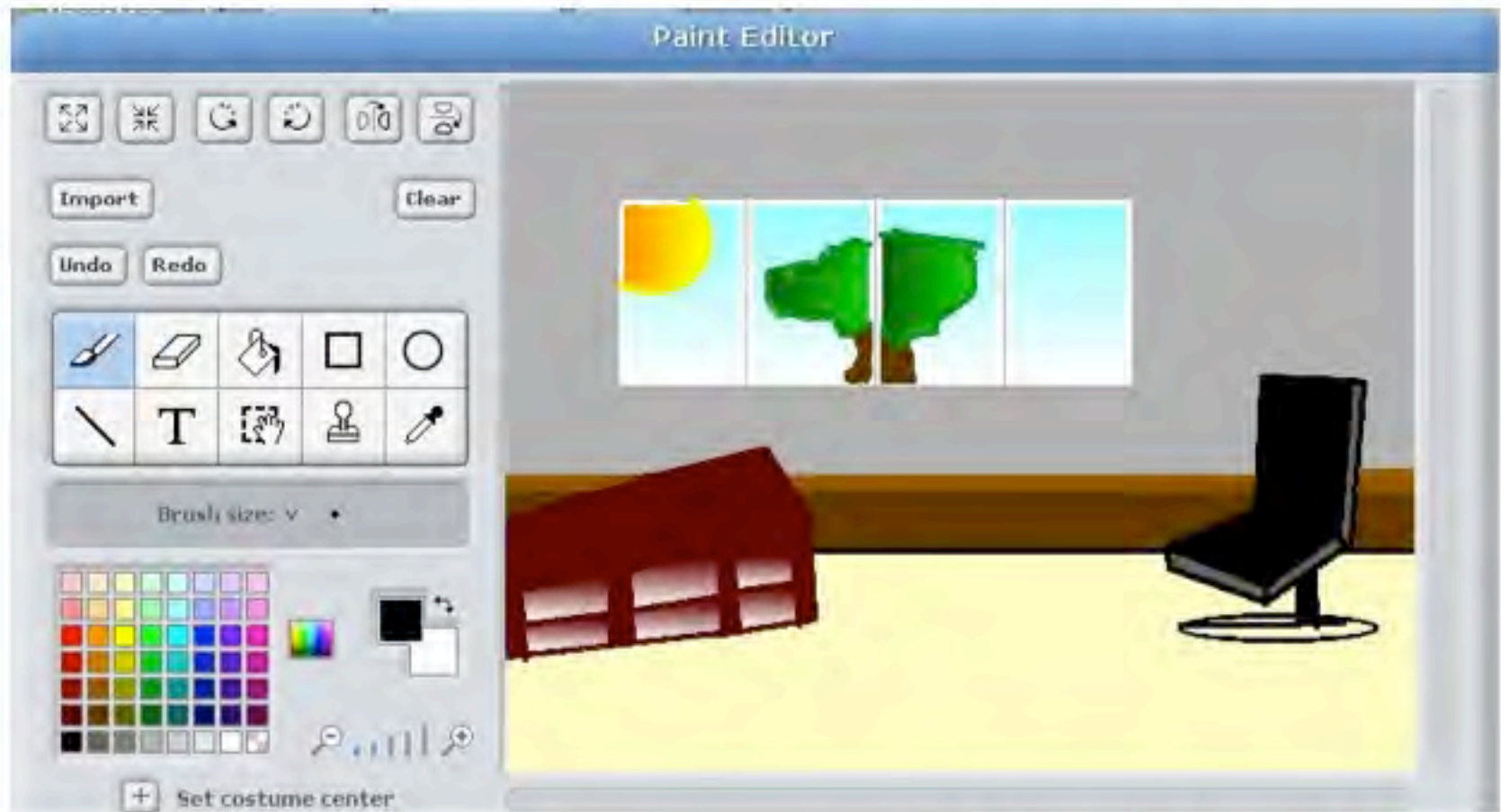


# Mood Change!



Created at [Doppleme.com](https://doppleme.com)

# Drew's Study Space Design



**Can you tell  
what kind of learner he is?**

# Add the sprites and scripts - Each with a purpose!

The screenshot displays the Scratch development environment. The main stage is titled "study\_space draw" and features a scene with a desk, a television, a dog, and a laptop. The Scripts area contains the following code:

```
when green flag clicked
  switch to costume [costume1]

when TV clicked
  repeat (2)
    switch to costume [costume2]
    wait 1 secs
    switch to costume [costume3]
    wait 1 secs
    switch to costume [costume4]
    wait 1 secs
    switch to costume [costume5]
    wait 1 secs
    play sound [Cupclink]
    say [GO!] for 2 secs
    wait 1 secs
  switch to costume [costume1]
```

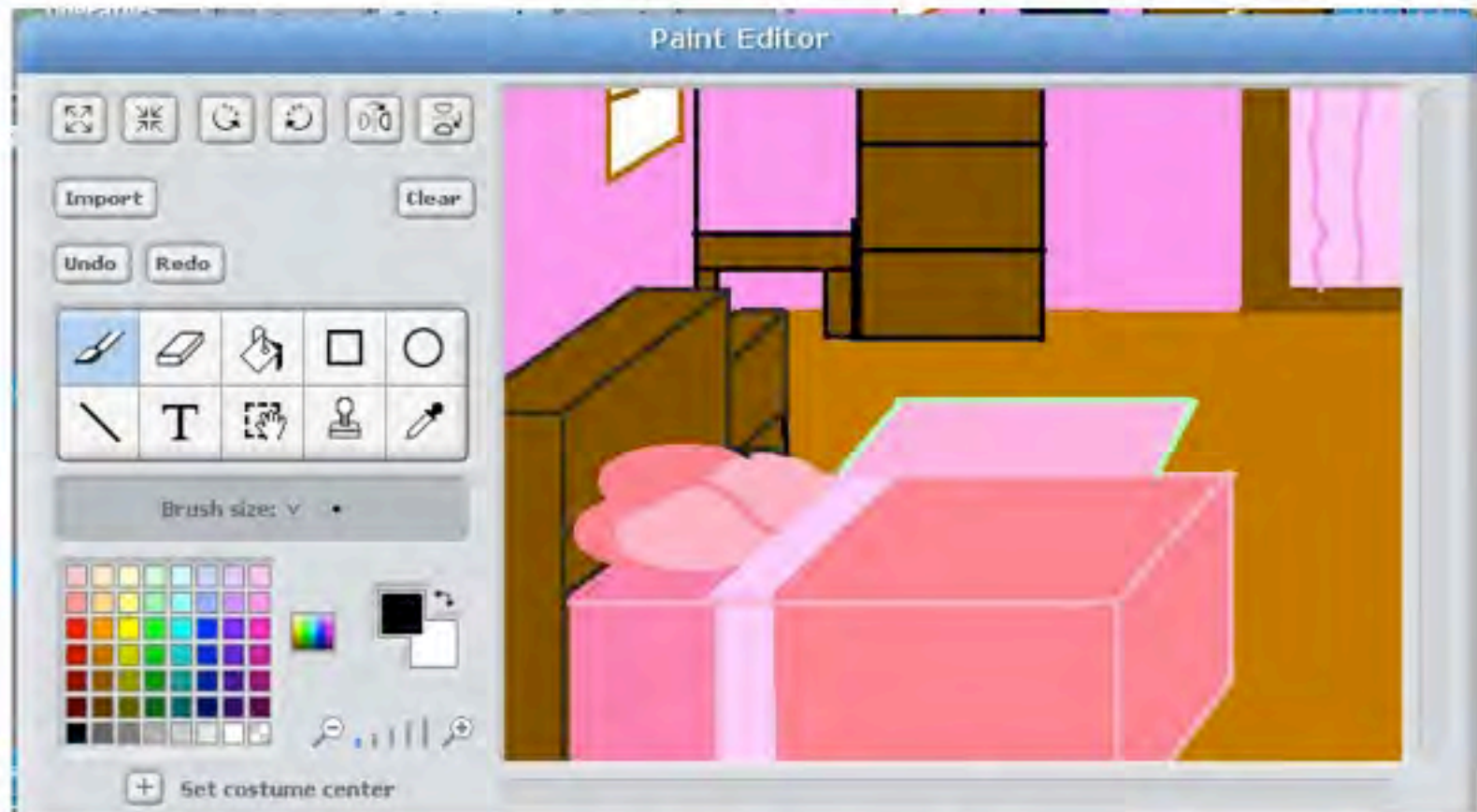
The Sprites area shows a "TV" sprite selected. The background is a simple drawing of a study space with a desk, a television, a dog, and a laptop. The scene is titled "study\_space draw".



Now can you tell?



# Yuliana's Study Space Design



**Perspective drawing  
takes time**

# Freedom to fill her world

The screenshot shows a Scratch project window titled "studyspace yuliana v". The main stage displays a 3D-rendered scene of a girl with brown hair sitting at a pink desk, reading a book. The room is decorated with a pink wall, a brown desk, a laptop, a boombox, a soccer ball, a trophy, and a poster that says "IF FASTPITCH WAS EASY... They'd call it baseball!". A black and white sports bag is on the floor next to the desk. The script editor on the left contains two event-action blocks: "when key pressed" followed by "think I have been looking over these notes for" and "when key pressed" followed by "think I'm going to play some music to help me". A white text box on the left side of the stage contains the text "with Music And Sprites". The sprite palette at the bottom shows various objects including trophies, books, a poster, a boombox, a phone, a laptop, a girl, a soccer ball, a sports bag, and a book.

with  
Music  
And  
Sprites



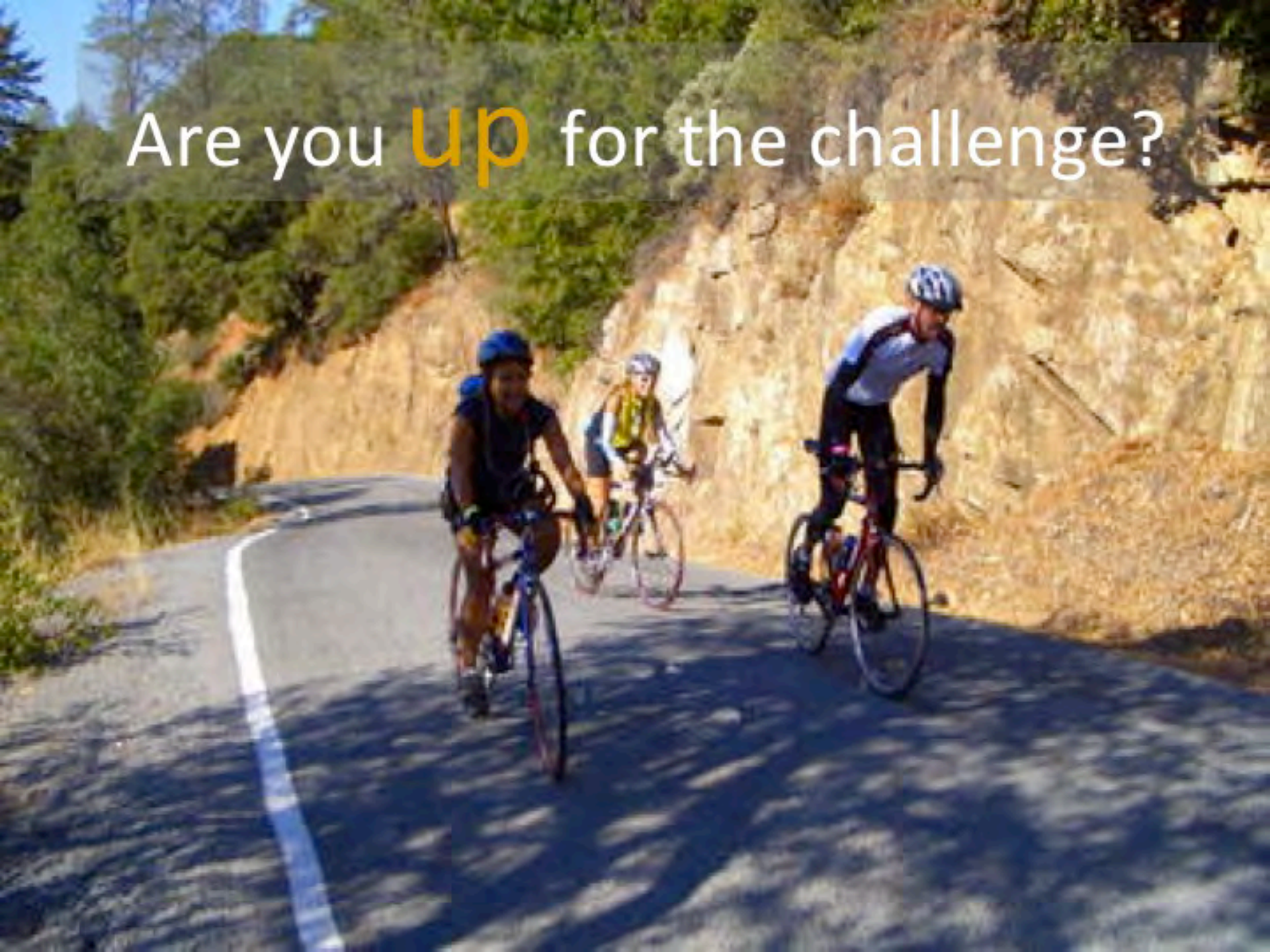
**Can you connect with this student?**



**Mix up the diet – throw a little computational thinking into their presentation world**



Are you **up** for the challenge?



**Frank Sabaté**

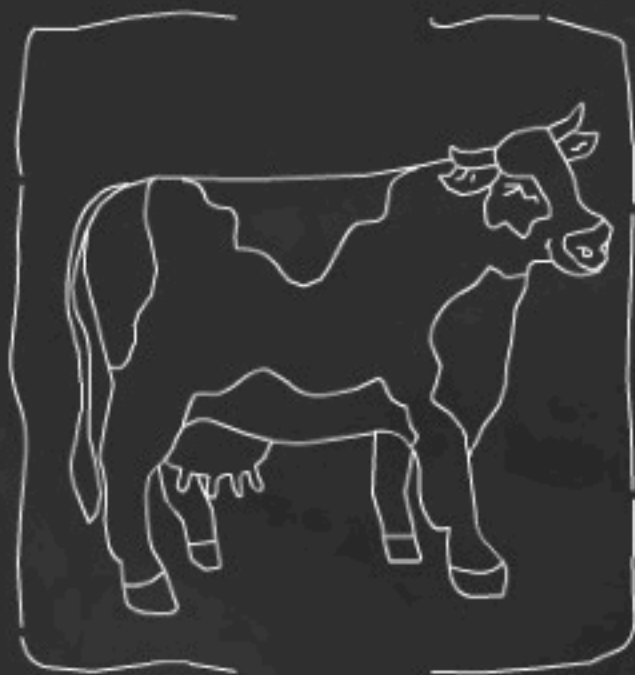
# Digital Augmented Stories with Scratch

Frank Sabaté

@franksabate

franksabate@escolaprojecte.cat

**escolaprojecte**

















# Videogame Creation Workshop



4th Grade Students



16 Sessions



Work in Pairs



Process and Final Product Evaluation



$$\begin{array}{r} + 2 \\ 2 \\ \hline = 4 \end{array}$$

# Digital Augmented Stories



5th Grade Students



8 Sessions

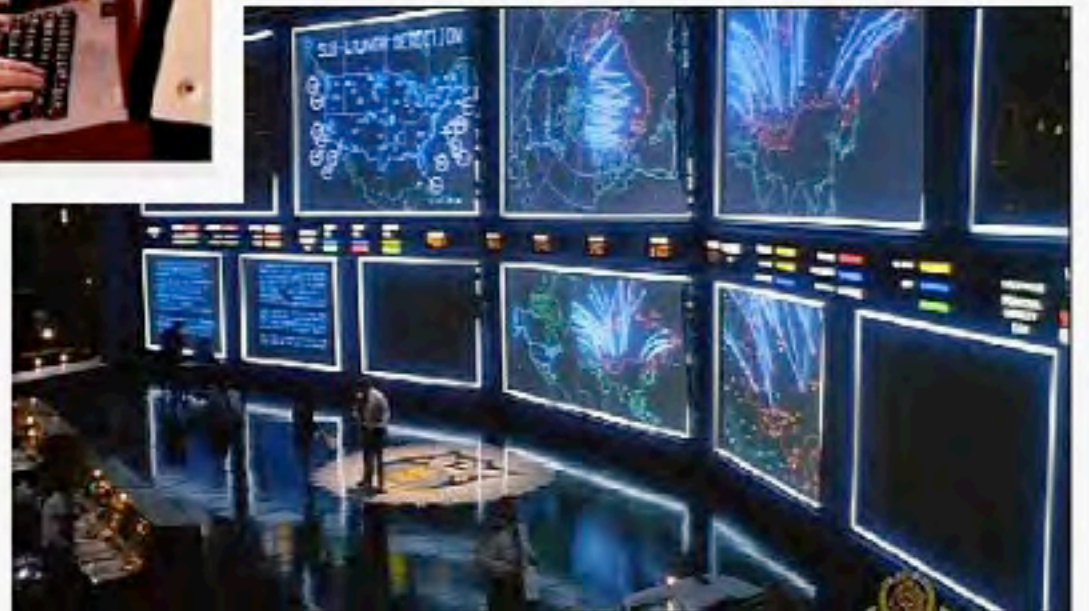


Work in Small Groups



Process and Final Product Evaluation

ABC





```
when I receive Start
  forever if loud?
    change size by 10
```



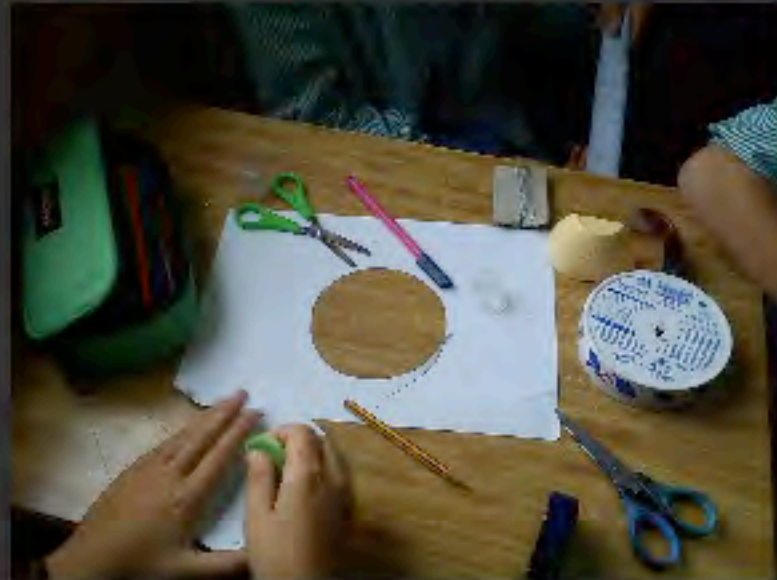
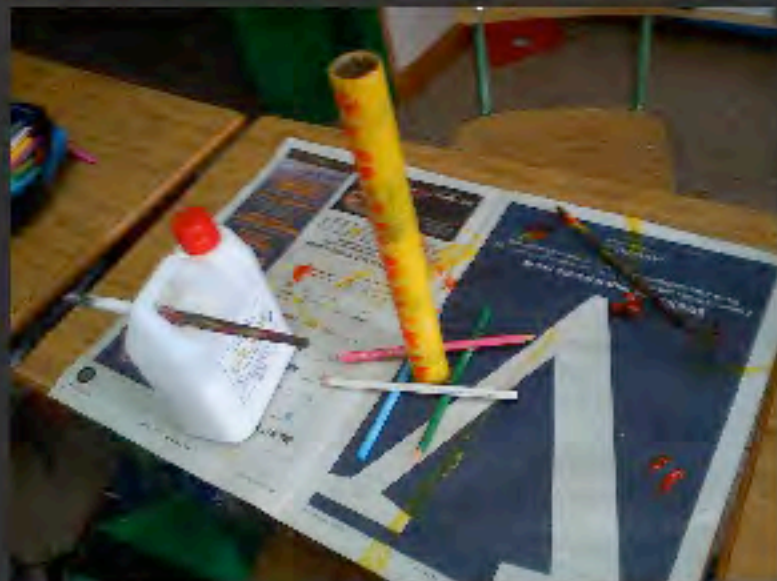
# Session 01: Brainstorming



## Session 02: Writing the plot



# Session 03: Designing the model



## Session 04: Sharing ideas



# Sessions 05, 06, 07: Programming



## Session 08: Recording the dialogs



Thanks!

Frank Sabaté

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**escolaprojecte**