Transforming Your Learning Environment

So Students & Teachers Can Thrive

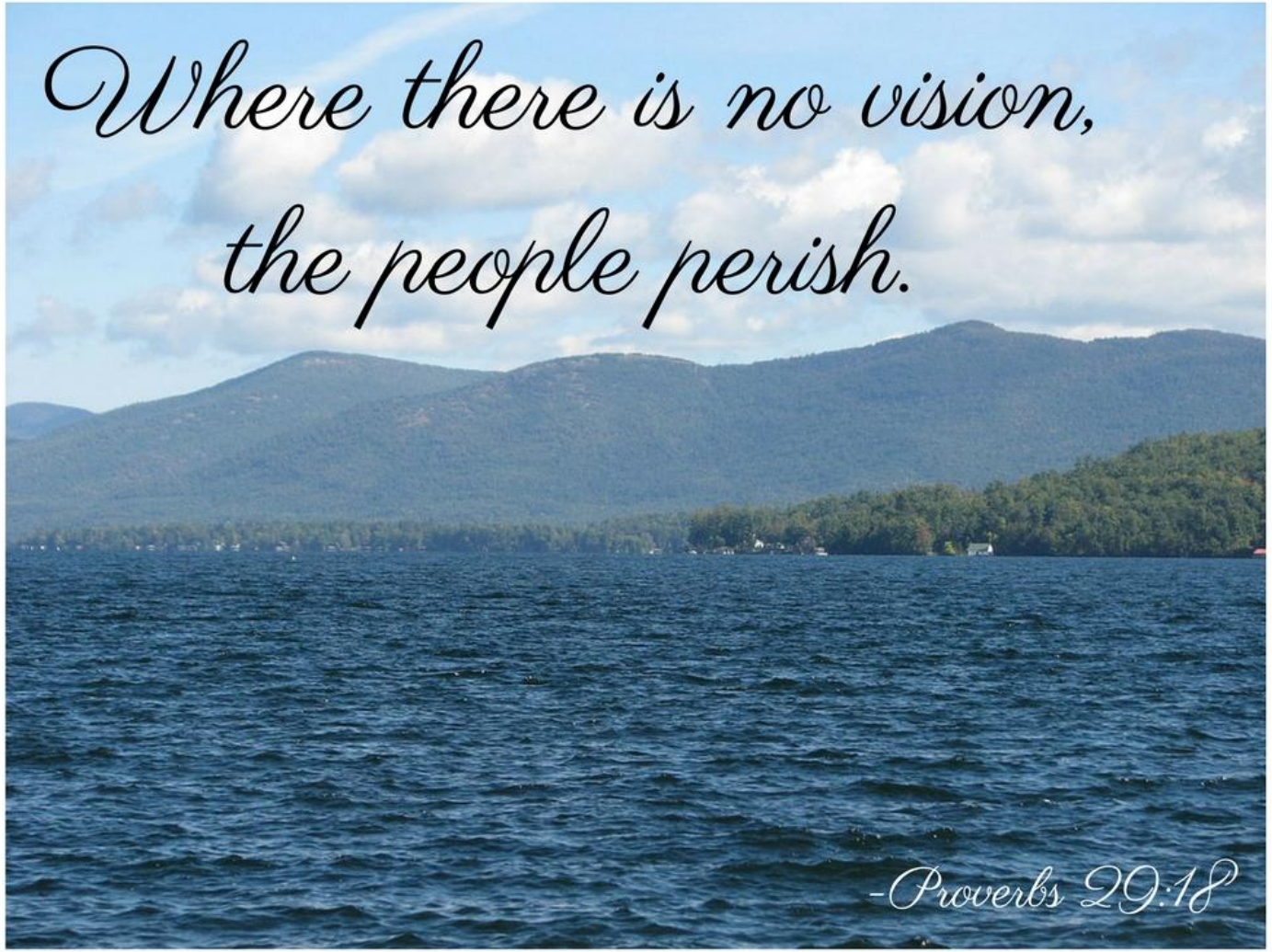
Presented by:
Lake George Elementary School
Ashley Gershen, Geoff Bizan, Bridget Crossman, Megan Coker, Jim Conway

Share how we transformed the learning environment at Lake George Elementary School through:

1. The structures for building shared goals and how to build the capacity to support them
2. An understanding of the 4 C's, New literacies, & Digital citizenship
3. Strategies and practical examples utilizing the WISE model of Inquiry
4. An overview of our 1-6 stem program & how it connects to the 4 C's

TodaysMeet

todaysmeet.com/SAANYS-LG


Where there is no vision,
the people perish.
-Proverbs 29:18

LGES STRATEGIC OBJECTIVES:
(3-5 year targets)

1. all students will demonstrate proficiency in traditional and new literacies.

2. all students will demonstrate positive character and leadership.

3. all students will demonstrate proficiency in 21st century skills.

2016-2017 Educational Cabinet Goals
(measurable 1 year goals)

1. All students will show leadership by contributing to the school community

2. The number of students demonstrating proficiency in reading on the fall benchmark will increase by 10% for each cohort and building wide on the spring benchmark

3. Staff and students will identify and apply new literacy and 21st century skills.

The best executive is one who has sense enough to pick good people to do what he wants done, and self-restraint enough to keep from meddling with them while they do it.

— Theodore Roosevelt —

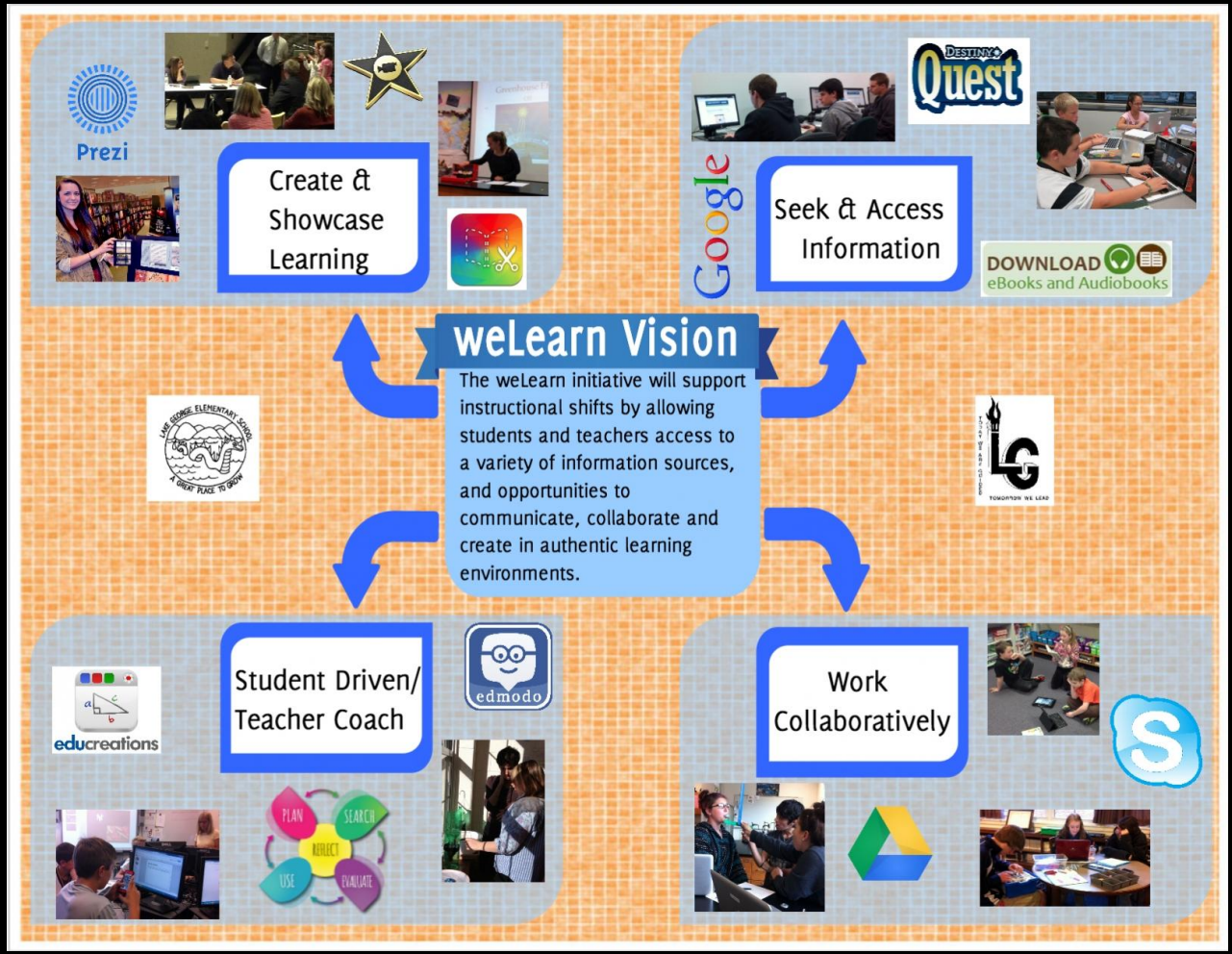
AZ QUOTES

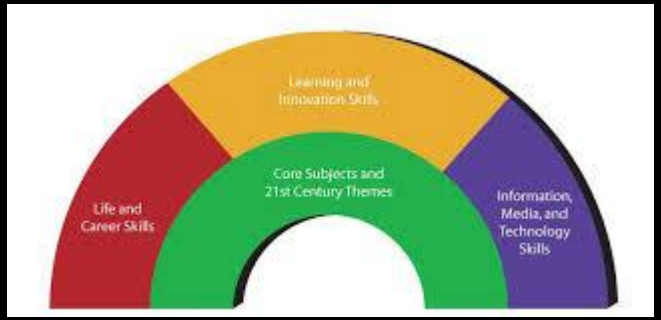
Transforming the Learning Environment through

“People don’t buy WHAT you do, they buy WHY you do it.”

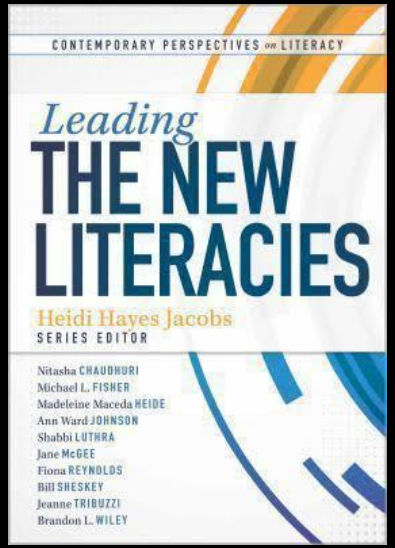
-Simon Sinek

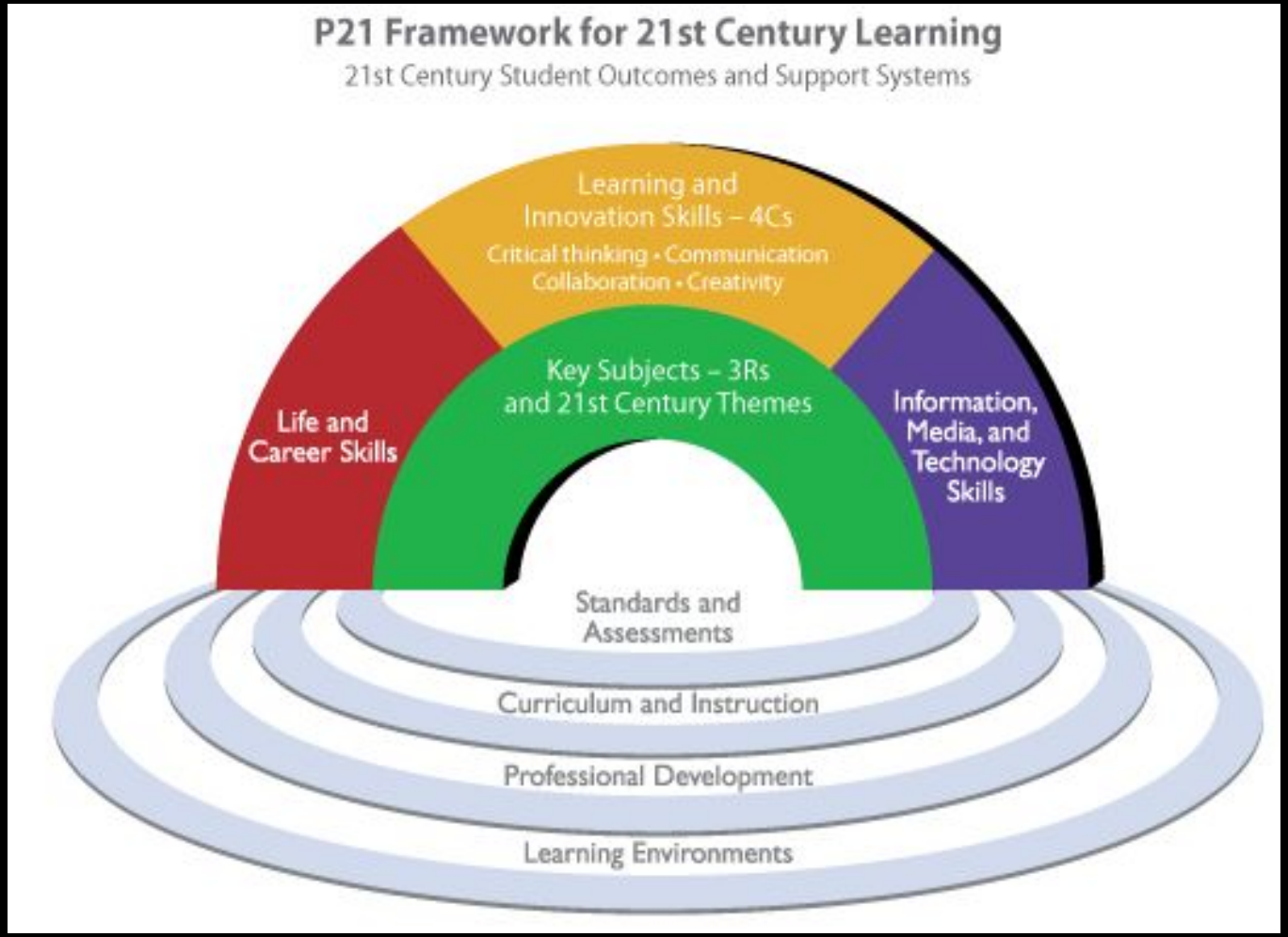
[Simon Sinek TedTalk: How great leaders inspire action]




Learning and Innovation Skills
Core Subjects and 21st Century Themes
Life and Career Skills
Information, Media, and Technology Skills


WONDER
INVESTIGATE
EXPRESS
SYNTHESIZE


CONTEMPORARY PERSPECTIVES on LITERACY
Leading
THE NEW LITERACIES
Heidi Hayes Jacobs
SERIES EDITOR
Nitasha CHAUDHURI
Michael L. FISHER
Madeleine Maceda HEIDE
Ann Ward JOHNSON
Shabbi LUTHRA
Jane McGEE
Fiona REYNOLDS
Bill SHESKEY
Jeanne TRIBUZZI
Brandon L. WILEY



Framework for 21st Century Learning Website

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.

The ability to learn, unlearn, and relearn is key to succeeding in the exponentially changing digital landscape.”

Will Richardson paraphrasing psychologist Herbert Gerjouy’s often quoted observation from Mastering Digital Literacy, Alcock, Marie, and Heidi Hayes Jacobs.

New Literacies

Heidi Hayes Jacobs

Digital Literacies

A student's ability to gather, evaluate, utilize, share and create information/content using digital tools and resources.

Media Literacies

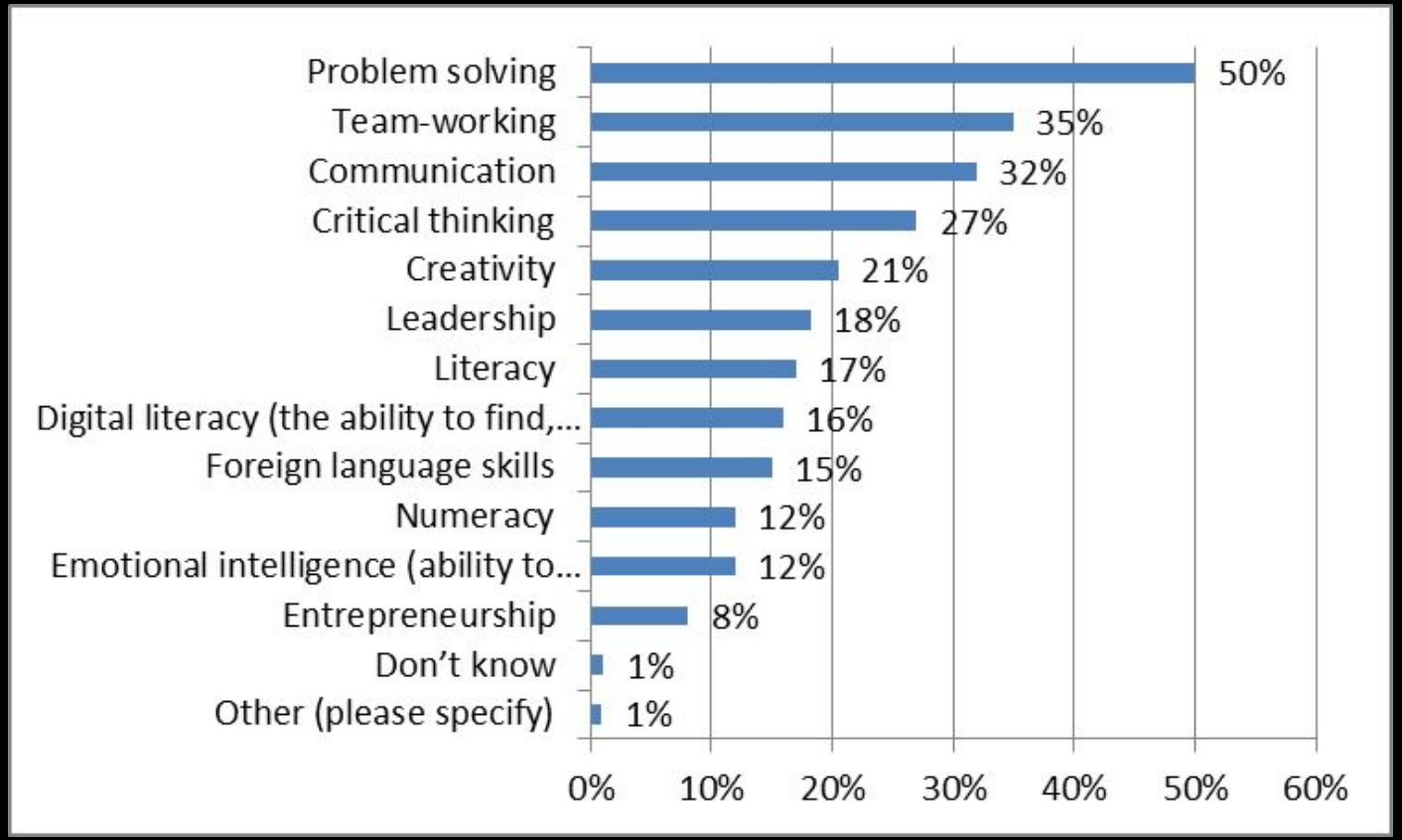
A student's ability to effectively analyze and create media (any form of information).

Global Literacies

A student's ability to connect people, places, problems, and possibilities. Investigate, Recognize, Communicate, Take Action

https://www.youtube.com/watch?v=xvOnha7XnaQ

Which of the following would you say are the most critical skills for employees in your organization to possess today? Select up to three.



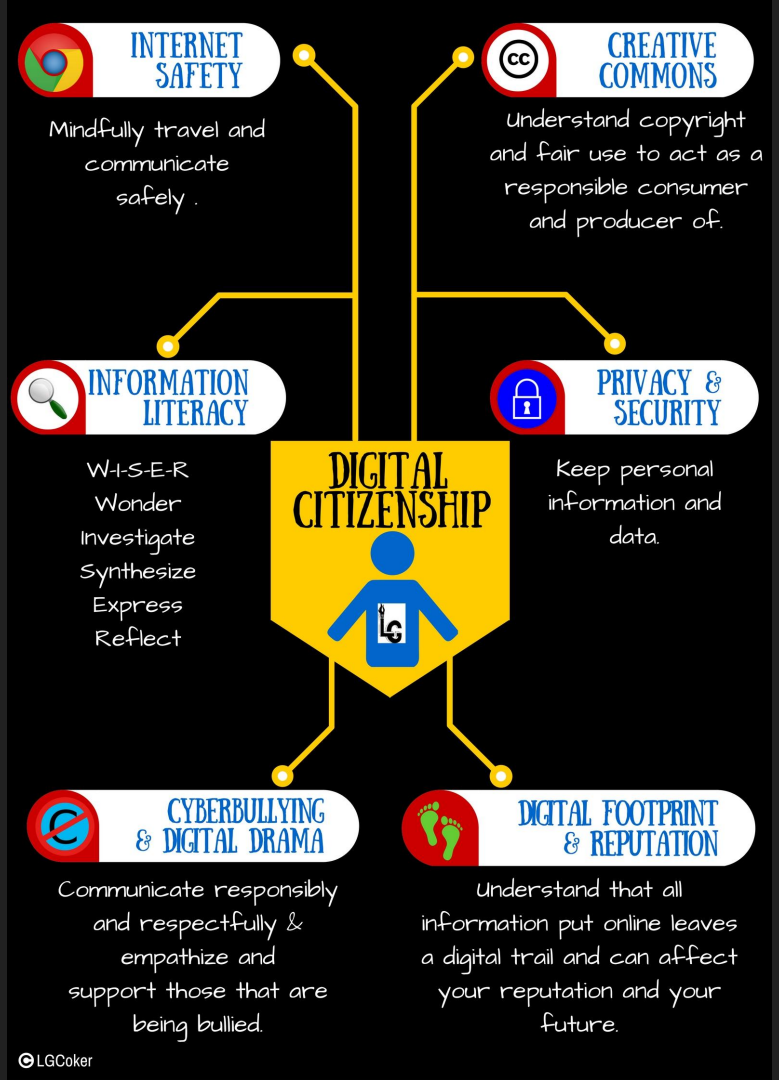
The Economist Intelligence Unit in conjunction with Google

At Lake George we strive to create

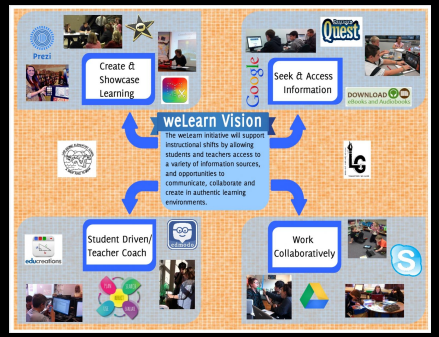
Digital Citizens

that recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

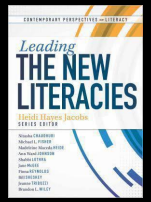
Lake George Central School District has utilized the Common Sense Media K-12 Digital Citizenship Curriculum as a foundation to create a proactive approach that is specific to Lake George and the weLearn initiative.

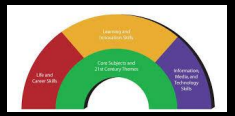


2013
Begin weLearn Initiative



2013-2016
Rollout weLearn





2016
weLearn Rollout Complete

Strategic Planning

weLearn

Create & Showcase Learning

Learners communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats and digital media appropriate to their goals.

Seek & Access Information

Learners critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

The weLearn initiative will support instructional shifts by allowing students and teachers access to a variety of information sources, and opportunities to communicate, collaborate and create in authentic learning environments.

Student Driven/ Teacher Coach

Learners leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals.

Work Collaboratively

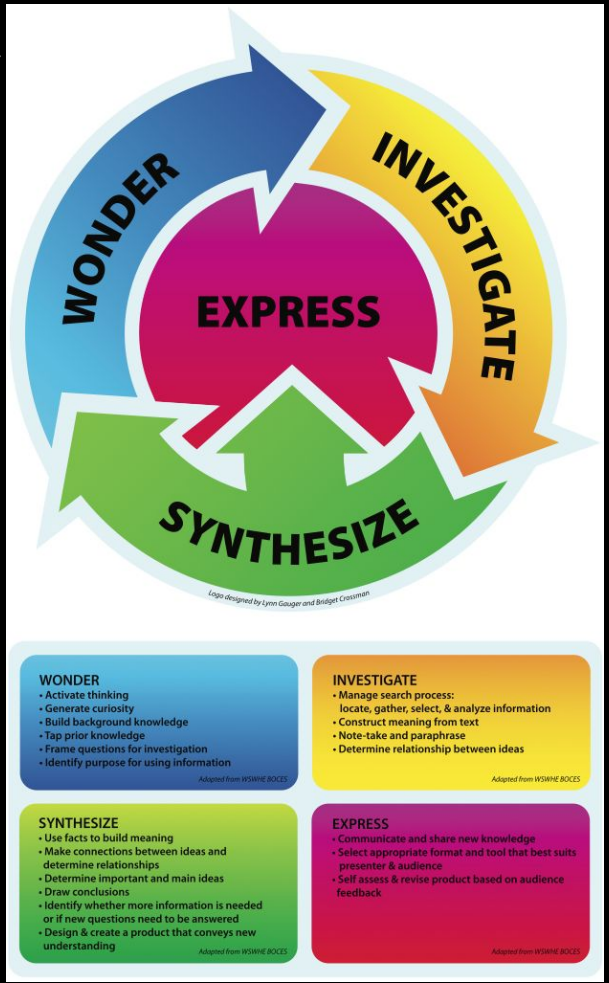
Learners use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

Digital Citizenship

Learners recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.

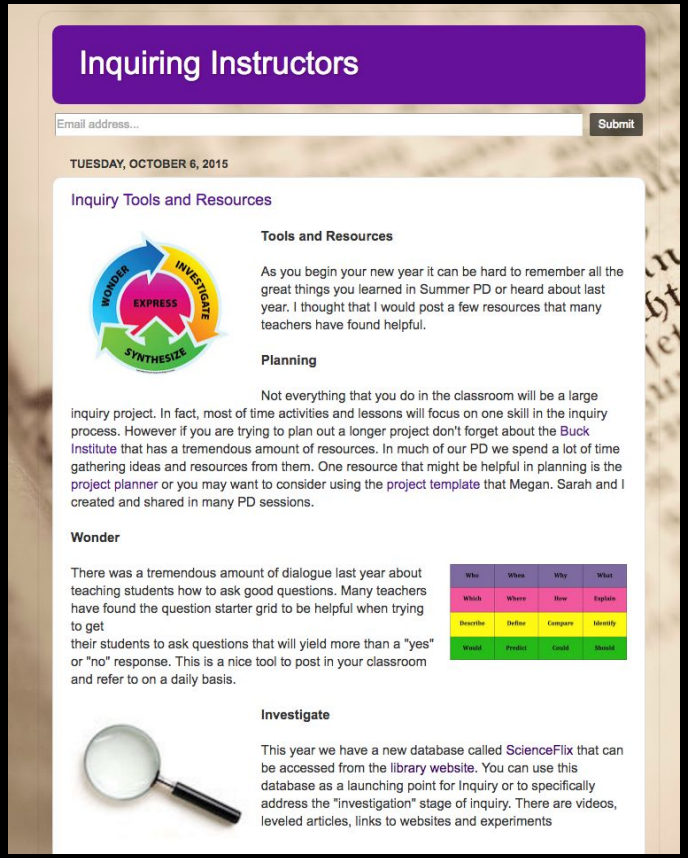
Transforming Learning through Inquiry

- Embedded Skills:
  - 4C's
  - New Literacies
  - Digital Citizenship
- Student- Centered
- Learning Space



The Process

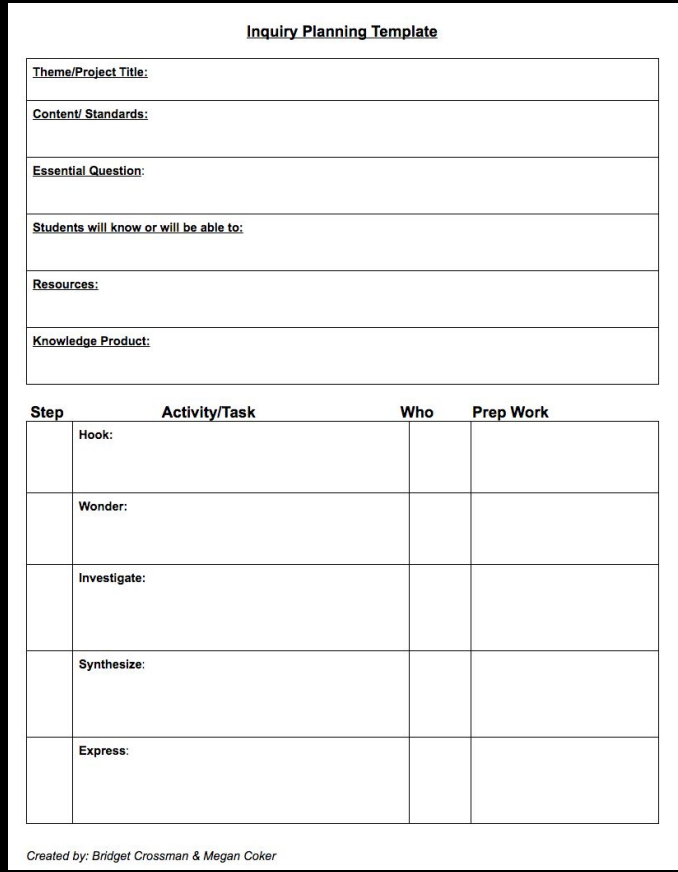
- What would the teaching staff need?
  - Key players
  - Time
  - Standards
  - Collaborative Resources
  - Shared school wide initiative & corresponding professional learning



The Process in Action

Geography Unit

- Key Players: Teachers, Librarian
- Time: After-school grade level meeting
- Standards (standard based content): SS Framework
- Collaborative Planning Resources:
  - Inquiry poster
  - planning blueprint
  - lesson resources/ materials
- District initiative: weLearn



Inquiry Planning Template

Theme/Project Title:	
Content/ Standards:	
Essential Question:	
Students will know or will be able to:	
Resources:	
Knowledge Product:	

Step	Activity/Task	Who	Prep Work
	Hook:		
	Wonder:		
	Investigate:		
	Synthesize:		
	Express:		

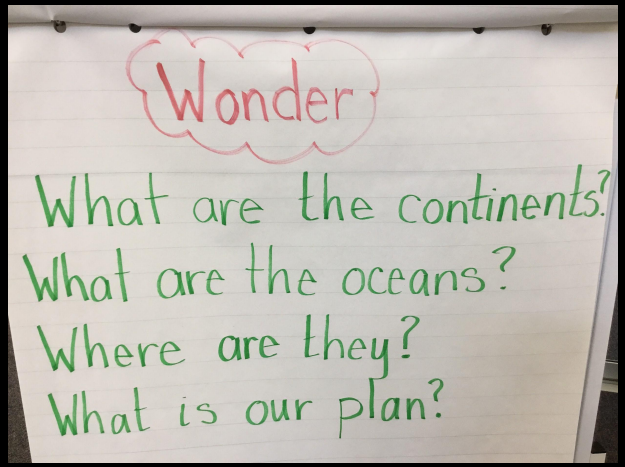
Created by: Bridget Crossman & Megan Coker

Students in Action

Wonder

- Students utilized their **critical thinking skills** to tackle their challenge:

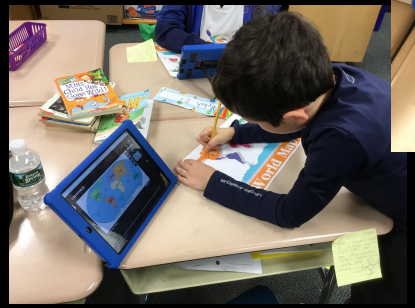
“Create a path around the world that touches each continent and ocean. You must use cardinal directions, continent names and ocean names to explain your path.”

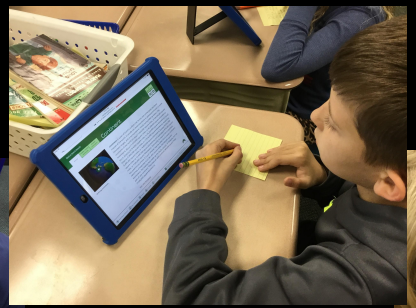


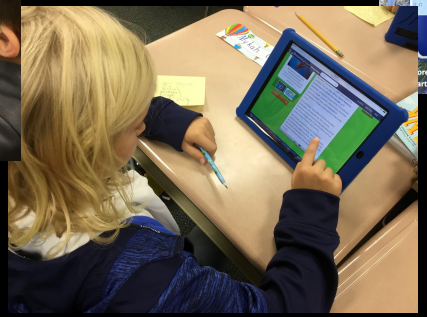
Students in Action

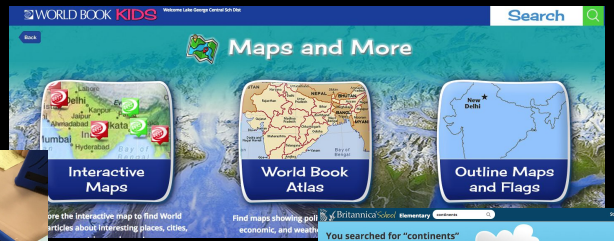
Investigate

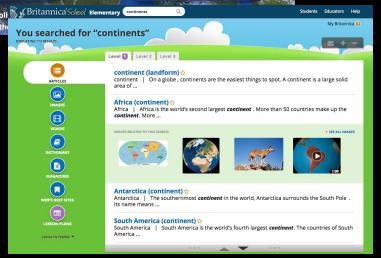
- Students needed to **seek information** and utilize both **digital** and **media literacy** skills to find, locate and evaluate safe and reliable digital resources.
- In addition students needed to practice good **digital citizenship** by citing their information and using images that are free to use and share.











Students in Action

Synthesize

- Students needed to use **creativity**, **critical thinking, communication**, and both **digital & media literacy skills** to create their map.

Students in Action

Express

- Students **expressed (communicated)** what they learned authentically by embedding their maps in an ebook that they created in their following unit of study on countries.

Lake Inquiry

Place-Based Learning

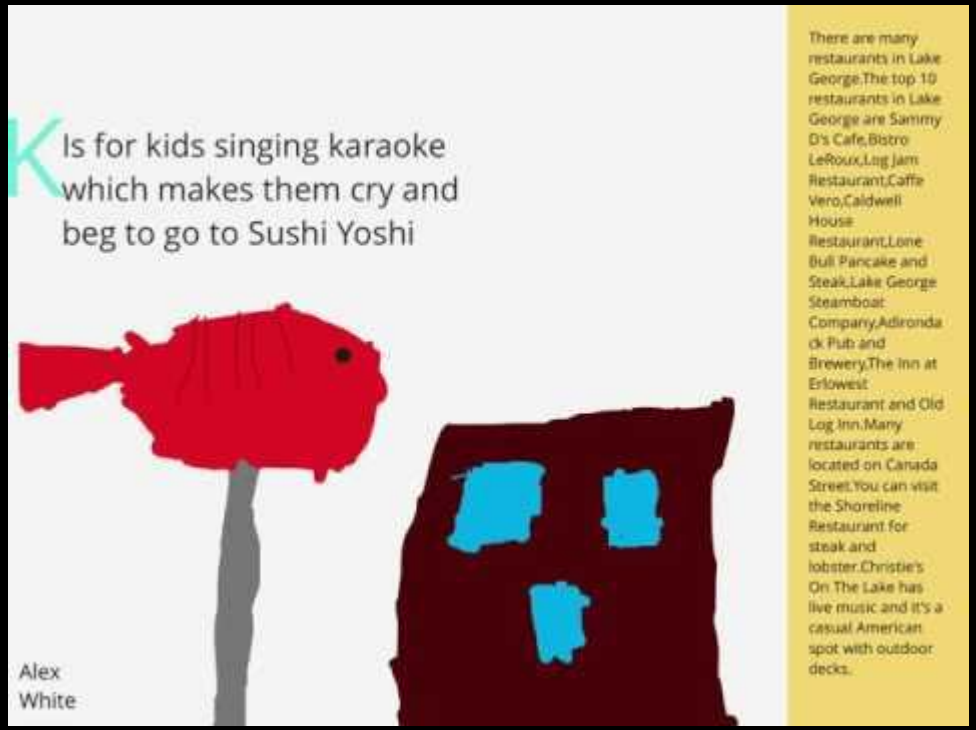
- 2nd Grade students visit the lake
- They use ipads
  - to capture what interests about the lake
  - Develop questions (Wonder)
- Investigate
  - Where can I find more information?
    - Books, databases, websites, experts
- Synthesize
  - How can I teach others about what I learned?
    - Ebooks, books, commercial, poster, etc.
- Express
  - Students shared their knowledge products.
    - Library, Parks Commision

2nd Grade Inquiry (Geography/Economics/History/Civics)		
Compelling Question	Why is the lake important to our community?	
SS Framework Key Idea(s)	2.5 Geography and natural resources shape how urban and suburban and rural communities develop and sustain themselves.	
Staging the Question		
Supporting Question 1	Supporting Question 2	Supporting Question 3
Wonder: What about the lake do you want to learn more about? What about the lake interests me?	Investigate: Where can I find more information about my interests with the lake?	Synthesize: How can I take what I have learned about the lake and teach others?
Formative Performance Task	Formative Performance Task	Formative Performance Task

Take the ipads to the lake. Use Educreations to take notes and develop questions about an area of the lake that you are interested in. When students come back each teacher will gather everyone's interests and group them into categories for topics.
 	
Businesses
transportation
recreational
animals & plants that are impacted by the lake
Services
Jobs
 	
Students will organize and develop further questions for their topic.
	Develop a list of resources for gathering information.
	• Experts within the community.
	• Websites
	• Printed materials (brochures, pamphlets, etc.)
	Locate resources and record answers to questions on note sheet.
	• Invite in experts.
	  ○ Lake George Park Commission
	  ○ Steamboat Company.
	• If they don't get all the information I need from the experts search further using websites and printed materials.
		Students will determine the best way to share their information with others.
		• ebooks
		• books
		• commercial
		• posters
		• etc.
		
		Students will begin creating.
		• Organizers for writing.
		• Students will choose tool.
		  ○ PicCollage
		  ○ Book Creator
		  ○ imovie
		  ○ composition style book
		  ○ etc.
		Students will ask themselves, "Do I have enough information or do I need to go back around the inquiry wheel?
		• Develop small groups with students who have unanswered questions.

Featured Source(s)	Featured Source(s)	Featured Source(s)
• The Lake • Ipads (Educreations) • Graphic organizers (Wonder questions, notes)	Use pamphlets, websites, experts in the field.	• writing tools • organizers • apps
Summative Performance Task	Express: Create a class information knowledge product on the lake. Each student/ partners will develop a section/ portion of the whole knowledge product. Teacher will also create a section and use it as a model throughout the unit.	
Taking Informed Action Example Project:	Final knowledge products will be shared on the chamber of commerce website, on class websites, and a copy will be placed in the library. This knowledge product was created using "Book Creator." It was an A-Z poem of our lake. The style of the book was set up like, Brad Herzog's books with a poem in the main section and an informational paragraph on the sides.	

Authentic Knowledge Product



STEM

CODING

VISUAL PROGRAMMING LANGUAGES --> JAVA

ENGINEERING

THE ENGINEERING AND DESIGN PROCESS

ROBOTICS

LEGO WEDO, LEGO MINDSTORMS EV3, AND SPHERO

Strategic Planning is key

- Support 4 C's
  - Communication
  - Collaboration
  - Critical Thinking
  - Creativity
- Support weLearn
  - Create and Showcase Learning
  - Seek and Access Information
  - Student Driven/Teacher Coach
  - Work Collaboratively
  - Digital Citizenship

- Support New Literacies
  - Digital
  - Media
  - Global

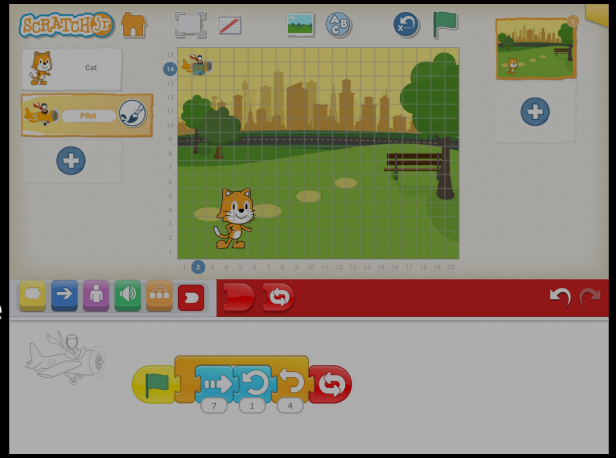
Staying true to our goals led us down the right path

High Potential/STEM Position

- STEM is scheduled during Science/Social Studies blocks
- Co-taught Units- Classroom teacher can transfer knowledge/experience to regular classroom and extend
- All students/teachers receive the same experience
- Utilized learning spaces throughout building

- 1st - 6th Grade STEM
  - 3 3-week units
    - Coding
    - Robotics
    - Engineering
      - NGSS Aligned
- After School Enrichment
  - First Lego League - Robotics Team
  - Coding and Robotics Clubs

Coding

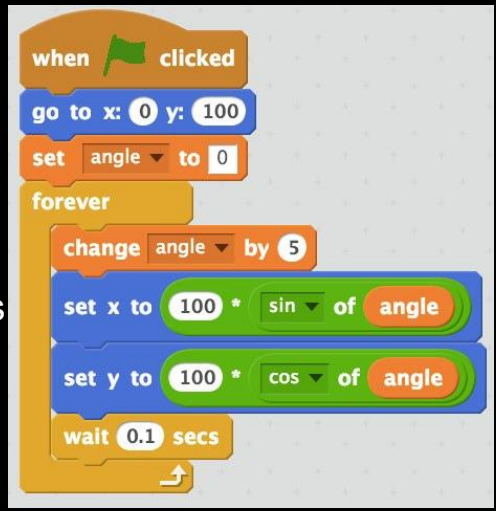


- Embracing a Growth Mindset
  - Exploration, Seeking help, accepting and exploring failure
  - Fostering a culture of innovation
- Mathematics Connections
  - Computational Thinking
    - Logic, organizing and analyzing data
    - Breaking a problem up into smaller, more manageable parts

C O D E

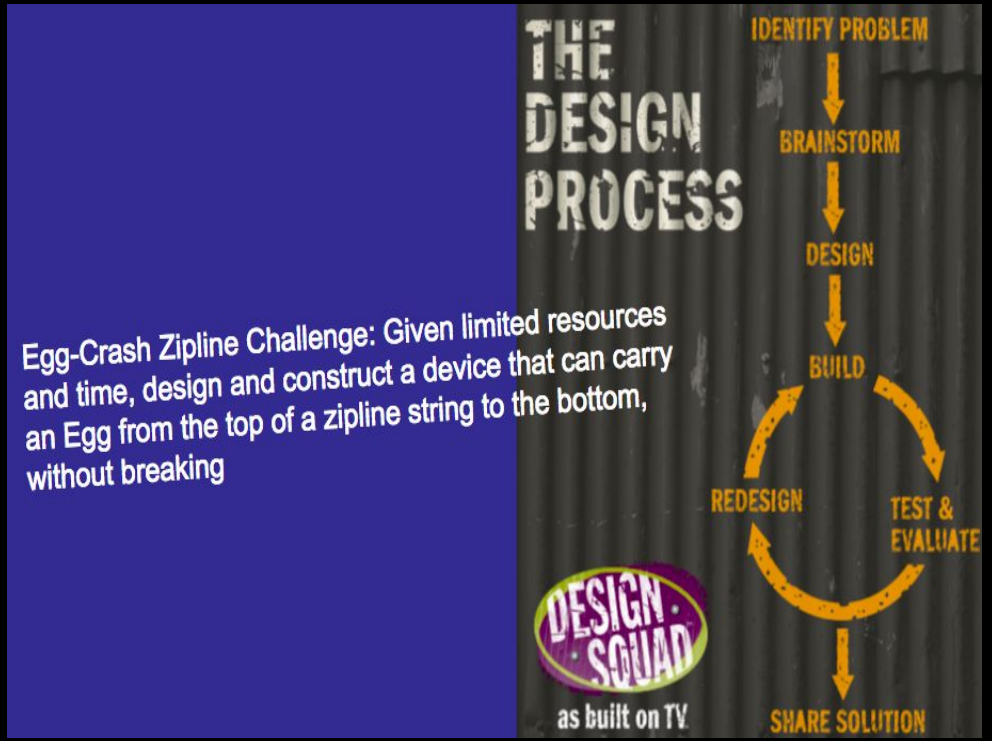
Sample Scratch Activity - Video Game Design

- Be **Creative** in their design
- **Collaborate** with others to share ideas/solutions
- Utilize **Critical Thinking** Skills to solve complex tasks -->Concurrency
- **Communicate** - showcase final product



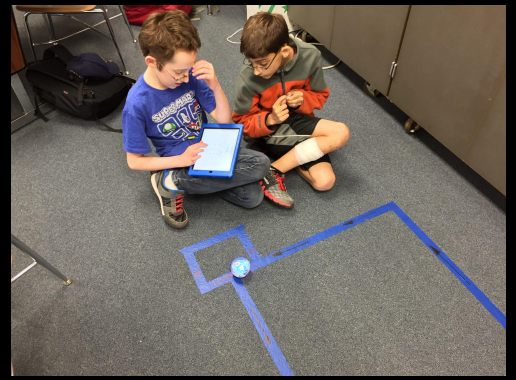
Engineering

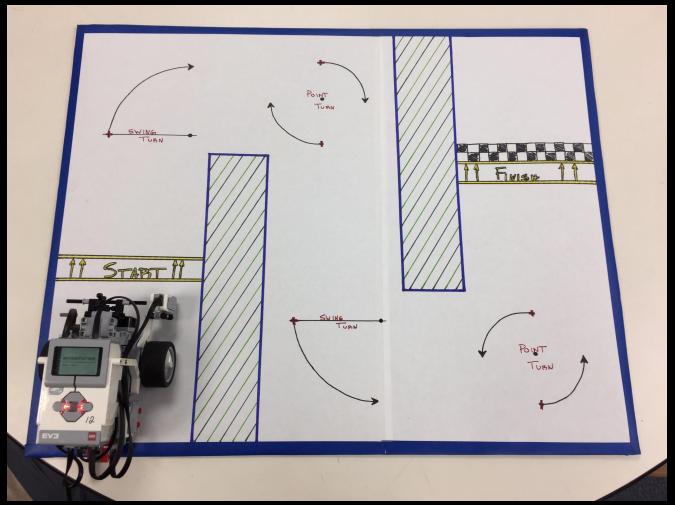
- Utilization of the Design Process
- Emphasis on Collaboration and Teamwork
  - Sharing of Ideas
  - Listening!
  - Bringing the strengths of individuals together

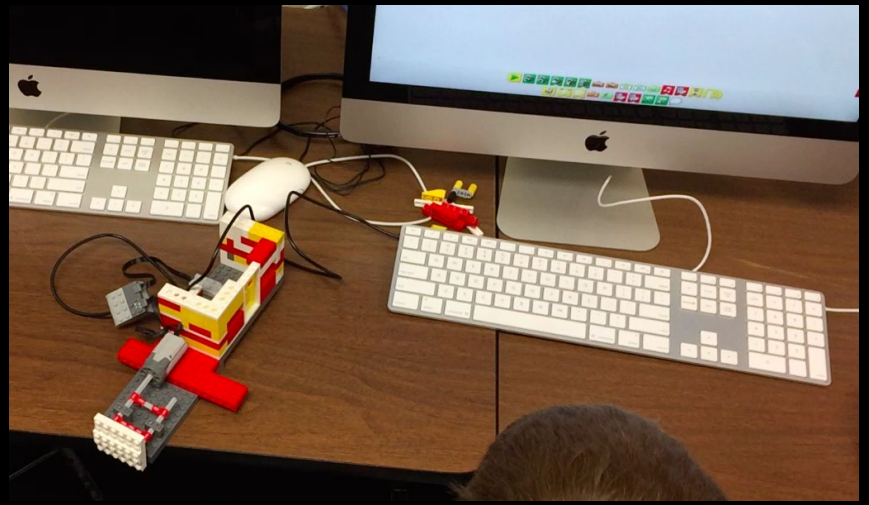


Robotics

- Application of Coding and Mathematics
- Work through challenges visually







Resources

Coding

iOS Tools

- Lightbot- Hour of Code
- Hopscotch
- Swift Playgrounds
- Scratch, Jr.

Web-based Tools

- Scratch
- Khan Academy - Computing
- Code.org

Robotics

- Sphero - SPRK Lab
- LEGO Mindstorms EV3
- LEGO WeDo

Engineering

- PBS Kids- Design Squad
- Marshmallow Challenge


Any
Questions ?

James Conway
Principal
conwayj@lkgeorge.org
@jconwaylg

Bridget Crossman
Library Media Specialist
crossmanb@lkgeorge.org
@LGESlibrary
lakegeorgelmc.weebly.com

Geoff Bizan
High Potential Teacher
bizang@lkgeorge.org
@mrbeezon

Megan Coker
Director of Technology
cokerm@lkgeorge.org
@CokerMeg
lgtechnology.weebly.com

Ashley Gershen
Third Grade Teacher
gershena@lkgeorge.org