



Diverse Role Models in Computer Science: Gallery Walk Adventure

Participant Name:	Elizabeth Hudson
District:	BFCSD
Grade Level:	4
Subject/Course:	Impacts of Computing
Cross-curricular Link:	ELA: Reading comprehension, discussion, written reflection Social Studies: History, cultural diversity, biography Social-Emotional Learning: Self-awareness, inspiration, identity Art: Gallery walk format, visual learning
Approximate Time (IN MINUTES):	40 mins

CONTENT AND SKILLS
Learning Objectives: • Identify a diverse range of role models in computer science. • Describe the achievements and contributions of different computer scientists. • Recognize that computer science includes people from different backgrounds, genders, countries, and time periods.
Essential Questions (optional): • Who are the people behind computer science? • How does diversity strengthen technology and innovation? • Can I see myself represented in computer science?
Students' I can statements . . . • I can name diverse role models in computer science. • I can explain why different people's contributions matter. • I can identify a computer scientist who inspires me.
How will you meet the needs of SWD and ELL/MLL students? • For SWD: • Provide large-print posters • Use simplified text on posters • Allow verbal responses instead of written • Provide sentence starters for reflection

- Offer buddy support during gallery walk
- For ELL/MLL:
- Pre-teach vocabulary (invent, achieve, algorithm, etc.)
- Provide picture-heavy posters
- Allow responses in home language
- Use visual supports and emojis
- Give extra processing time

NYS COMPUTER SCIENCE AND DIGITAL FLUENCY STANDARDS

List all standards that authentically align (e.g., K-1.CT.4)

- 4-6.IC.7 Identify a diverse range of role models in computer science.

OTHER SPECIFIC STANDARDS (e.g., Content, SEL Benchmarks)

List all standards that authentically align

<https://www.p12.nysed.gov/sss/documents/SELBenchmarks2022.pdf>

- SEL Goal 1 – Self-Awareness : Develop a strong sense of identity and recognize personal strengths and values.
- SEL Goal 2 – Social Awareness : Recognize and appreciate diversity and individual differences.
- SEL Goal 2 – Social Awareness : Demonstrate perspective-taking and empathy for others.

INSTRUCTIONAL PLAN

List the steps of the lesson, including instructions for the students.

Add and highlight Standard Indicator next to activity that aligns

Hook / Opening (2 minutes)

Teacher Says: "Who invented the computer? Was it one person or many?"

The answer might surprise you! Today, we're going to meet *eight incredible people* from different countries, backgrounds, and time periods — all of whom changed computer science forever. Some were mathematicians, some were artists, some were scientists. Some are from the past, and some are still alive today!

Let's take a walk and discover these amazing role models!" 🧑

Gallery Walk Instructions (10 minutes)

Setup:

- [Tape pioneer posters](#) around the room (on walls, boards, or tables)
- Space them out so students can move without crowding

Teacher Says:

"You're going on a gallery walk! Here's how it works:

1. Walk quietly around the room
2. Read each poster carefully
3. Notice: Who are these people? Where are they from? What did they invent?
4. Pick a favorite as you walk — the person who inspires you most
5. When the bell rings, come back to our circle"

What Students Do:

- Move at their own pace
- Read all 8 posters
- Think about which pioneer interests them most
- (Optional: jot notes or draw sketches)

Whole-Class Discussion (10 minutes)

Discussion Prompts:

Ask students (raise hands or popcorn style):

1. "What surprised you about these pioneers?"
 - Expected: They came from different countries, had different jobs, lived in different times, etc.
2. "Did you notice something about the diversity of these people?"
 - Expected: Different genders, races, countries, time periods, talents
3. "Who did you think was the most interesting? Why?"
 - Expected: Students share their favorites and reasons
4. "What do all these people have in common?"
 - Expected: They were curious, creative, brave, problem-solvers, changed the world
5. "Can you see yourself in any of these pioneers? Why or why not?"
 - Expected: Personal connections to backgrounds, interests, talents
6. "What did you learn about computer science from this gallery walk?"
 - Expected: It's not just one thing, it involves many skills, many people made it, it's still growing

Reflection Worksheet (12 minutes)

-  Reflection Worksheet
-  Reflection Worksheet - Answer Key

Wrap-Up (2 minutes)

Teacher Says:

"Who would like to share which pioneer inspired them and why?"

Allow 2–3 volunteers to share briefly.

"You just met eight amazing people from different times, places, and backgrounds — all part of computer science history. And guess what? You could be the next role model! Computer science needs people like all of you — with your own unique ideas, backgrounds, and talents." ✨

Teaching Tips

✨ Make it personal: Ask students if they know anyone who works in technology or computer science. Do they see diversity there?

✨ Extend it: Have students create their own "pioneer poster" for a living computer scientist they admire (parent, teacher, community member, or public figure).

✨ Connect to their lives: Ask, "Which pioneer's job sounds most interesting to you? Why?"

✨ Celebrate diversity: Emphasize that computer science needs all kinds of people — artists, mathematicians, dreamers, problem-solvers, people from every background.

✨ Keep posters up: Display student reflections next to the pioneer gallery for ongoing inspiration.

SPECIFIC NEEDS: MATERIALS / RESOURCES / TECHNOLOGY

Add additional resources needed for this lesson such as instructional technology templates, images, videos, etc.

-  Pioneer Posters (Print & Display) (printed, 6-8 pioneers
— laminate for reuse)
- Discussion prompt poster or chart
-  Reflection Worksheet (printed, one per student)
- Markers/crayons (optional, for decorating reflections)
- Tape (to hang posters around room)