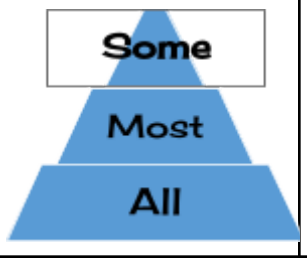
	At P811M, we believe that our students learn best in classrooms that are **structured and predictable**—in those designed to meet students' **unique physical, academic, and socioemotional** needs. We believe that students learn best when they are engaged as **active participants** in learning and are given access to **appropriately rigorous** curricula. We believe that fostering **student voice and meaningful communication** supports the development of the **whole child** and his/her unique identity.
Teacher Name	Alana Robinson
Date(s)	Week of 5/23/22 - 5/27/22 Ms. Shahid's Class Grades (4-7th)

School Educational Goals (CEP Goals)	**Language and Communication:** Students will demonstrate an increase in functional communication skills.	**Student Engagement:** Lesson Pacing/student to student interaction/student directed learning/ assessment.	**Writing:** Students will demonstrate an improvement in writing skills according to the Developmental Writing Continuum (DWC) and/or the teacher created rubric.

Webb's Depth of Knowledge	**Recall** (memorize, repeat, who, what, where, etc)	**Skill/Concept** (identify, classify, cause/effect, compare, predict, etc)	**Strategic Thinking** (revise, construct, cite, investigate, etc)	**Extended Thinking** (apply, analyze, critique, create, etc)

Subject / DLM Essential Element	Technology-Computer Science
What are we learning today and why?	CS Career Exploration with Google Desk Talks Program, Special VIrtual Guest Ron Fanzion, CS Career Pathways What is Data and how Google uses Data ? ● Students will explore and discuss CS Careers through virtual video presentations and with Ron Farizon, Google Analytics Manager @ Google Cloud, virtual guest speaker from Google (V04). ● Students will learn about data, how it's used in CS applications at Google, and its real world applications (V04).
What are the CS Perspectives, Practices, & Concepts in this lesson?	CS Practices, analyzing, communicating CS Concepts, data, abstraction Student Outcomes explorer(1), creator(2), innovator(3), citizen(4) New York State Computer Science & Digital Fluency Standards. New York State Computer Science & Digital Fluency Standards PDF chrome-extension://ieepebpjnkhaiioojkepfniodjmjjihl/data/pdf.js/web/viewer.html?file=https%3A%2F%2Fwww.regents.nysed.gov%2Fcommon%2Fregents%2Ffiles%2F120p12a4.pdf IC - Impacts of Computing (Career Pathways) CT - Computational Thinking (Data Analysis & Visualization, Abstraction & Decomposition) Cybersecurity - (Risks - compare/contrasts information should be kept private vs information that might be made public)
UDL 	**Some Students will be able to:** ● Give examples of data in real world context (talk, draw, demonstrate, with support) ● Define data (talk, draw, demonstrate, with support) ● Explain what Virtual Google Desk Talk CS Guest does or how he uses data at Google? (talk, draw, demonstrate like sing, with support) ● List some ways that data is used (talk, draw, demonstrate) ● List one or two types of data(name, music, words, streets, etc) is found in Google tools (Google Search, YouTube, Google Maps) ● What are some examples of data that Google collects about you?

	Most Students will be able to : ● Define data (talk, draw or demonstrate) ● Give examples of data (talk, draw, demonstrate like sing) ● Which Google tools do you use and what type of data do they collect (talk, draw, demonstrate)
	All Students will be able to : ● What's data (talk, draw or demonstrate) ● How's data represented or shown (talk, draw, or demonstrate) ● What Google tool do you use the most (Google Search, YouTube, Google Maps) ● Ask a question to the virtual guest ● Develop a question they want to ask the virtual guest about data.
Engagement Options	● Delivered the lesson to smaller groups of students therefore encouraging more discussion. ● Some students watch the video(s) on their own. ● Used Google Slide add ons such as Pear Deck and Nearpod to increase engagement. Exported parts of lesson to Nearpod on Day 1 for more engagement and participation.
Representation Options	● Broke the lesson into multiple parts by section. ● **Record** your screen for the modeling parts and share with students afterwards. ● Use Google Slide add ons such as Pear Deck and Nearpod to allow for multiple entry points into the lessons based on student learning preferences (ex. visual, auditory, etc.)
Action and Expression Options	● CHOOSE which worksheets you will assign based on student level. ● Assign the slide deck and digital worksheets to students for asynchronous completion. ● Swap the worksheet and have students respond using Flipgrid (based on their level) or attach the worksheet to Flipgrid that way you can provide feedback. ● Use Google Slide add ons such as Pear Deck and Nearpod to allow for multiple means of response. ● Complete the digital independent activity as a class during a live session by sharing your screen. ● Students were given a choice to either respond to the assessment (Day 1) independently or with the class. For students that chose the class option, we had a class discussion and typed their answers onto the worksheet. Put students' names after their responses.
Resources:	● Mini Lesson/Introduction to Data ● Data Video Explainer: Data! | Mini Math Movies Scratch Garden (8:13 mins) ● NumberRock Song: Bar Graphs & Picture Graphs Song (2:53 mins) ● Clustering: Kids Explain Data Science (2:21 mins) ● Data for Kids: What is Data Video Explainer (1:30 mins) Advanced Discussion on Data: Data and Algorithms In this video we'll explore algorithms as well as learn about data and how computers store, process and make use of data. ● Love Letters for Computers: (Hello Ruby) Data and Algorithms Video PlayList

	• DOE CS4ALL Collaboration - Google Desk Talks **Google Desk Talks** In order to support teachers with introducing students to potential career pathways in tech, Google volunteers in NYC have organized a new program called "Desk Talks." Volunteers from many different backgrounds and skill sets at Google have signed up to connect with teachers and run virtual talks and workshops with their students. Topics range from subject areas in which the volunteers have specializations - like data, search, AI - but Googlers are also open to hosting AMAs, or tailoring to your ideas or student interests. Additionally, volunteers will share more information about how students can continue their exploration of CS and relevant careers. Assessment on Data • Love Letters for Computers: Data and Algorithms - Count & Graph (Day 1) • CS Career Pathways Google Desk Talks with Virtual Speaker Ron Farizon Q & A (Day 2) • CS Career Pathways Google Desk Talk Debrief - class discussion about what students liked about the visit and what they did not like. What suggestions would they give to leaders at the Google Desk Talks program to make the program more engaging for students with disabilities and diverse learners like themselves.
Anticipatory Set	• Poll 1: Take a Class Poll on Favorite Ice Cream - Do you like Choc, Van, Straw? - Graph data from poll • Poll 2: Take a Class Poll on Google Usage - -What google tool do you use - YouTube, googleSearch, googleMaps Graph Data from poll Introduce concept of data and representing data with data discussion, visualization, and then song and video explainer Take a poll ask students what's their favorite ice cream flavor Represent the class data with bar graph, etc, Ask students what is VO3's favorite ice cream flavor How can we use this class data (when class earns a class party then you know what flavor to get the class, etc) Should this data be shared with the public or kept private ? • Sing NumberRock Song: Bar Graphs & Picture Graphs Song • Show Data Video Explainer: Data! | Mini Math Movies Scratch Garden • Google -
Vocabulary	• Data Data Representation • Data Visualization • Algorithms • Data Analytics • Careers in Computer Science
Mini Lesson (I Do) Micro-Lesson	Day 1: Students will be introduced to the CS topic data and get a basic understanding of the various ways data can be represented. Day 2: CS Career Pathways: Virtual CS Guest - Google Desk Talks with Ron Fanzion, D Day 3: Debrief Google Desk Talks session what is debrief ?

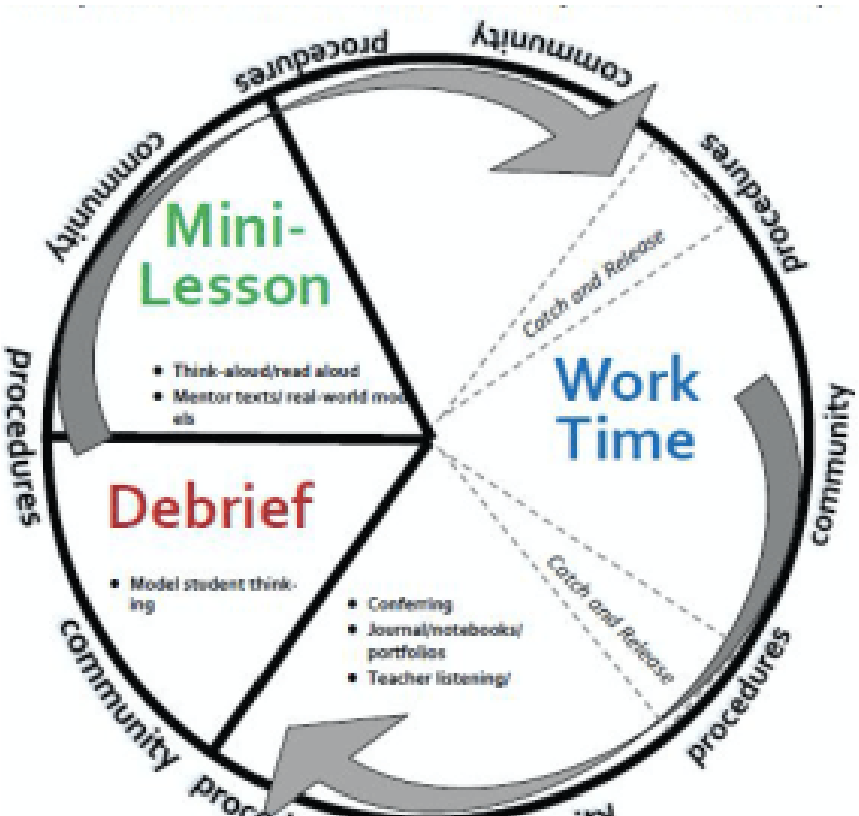
WE DO **(Teacher & Students)**	Day 1: Students review guest speaker's presentation on Data 5.27.22.CS4ALL.Google.Desk.Talks [Ron] Google Desk Talk: Data Students brain storm questions to ask virtual guest speaker with Google Desk Talks Day 2: CS Career Pathways: Google Desk Talk with Virtual Guest Speaker, Ron Farizon, Google Analytics Manager. Students engage in a Q & A with guest speaker Ron. Teacher shares presentation with students' questions from the day before 5.23-5.27.22.Spring.Google.Desk.Talks.Tynker.Patterns.Conditionals.Intro.Creati… Day 3: Post CS Career Pathways Discussion: Student and class debrief about what they liked and what they did not like and how it can be improved 5.23-5.27.22.Spring.Google.Desk.Talks.Tynker.Patterns.Conditionals.Intro.Creati… (Slides 11 -13) Debrief Discussion		
YOU DO **(Students with Teacher Support)**	**Student Names**	**Supervising Adult** **(How are paraprofessionals engaging students)**	**Activity**
Group 1	Alex	Ms. Portia supports Alex's focus, on-task behavior, and completion of academic task during class discussion and virtual guest speaker v	Day 1: Class Discssion on data and sort graph and color data worksheet Day 2: As a focus on task activity, students color a CS Career coloring page during our Google Desk Talk virtual speaker Day 3: PostCS Career Pathways review - what did students like about the yesterday's virtual guest and what suggestions would they give Ron and Google to make the Google Desk Talks more engaging?
Group 2	David	Mr. Angel supports David's on-task behavior and takes him for walks and breaks when requested during the virtual guest speaker and during class instruction	Day 1: Class Discssion on data and sort graph and color data worksheet Day 2: As a focus on task activity, students color a CS Career coloring page during our Google Desk Talk virtual speaker Day 3: PostCS Career Pathways review - what did students like about the yesterday's virtual guest and what suggestions would they give Ron and Google to make the Google Desk Talks more engaging?
Group 3	Adanis Jaylen B. Jaelyn C.	Mr. Khan supports students in focusing, redirecting them on academic task	Day 1: Class Discssion on data and sort graph and color data worksheet Day 2: As a focus on task activity, students color a CS Career coloring page during our Google Desk Talk virtual speaker Day 3: PostCS Career Pathways review - what did students like about the yesterday's virtual guest and what suggestions would

			they give Ron and Google to make the Google Desk Talks more engaging?
Group 4	Leia Camille Jamaire Marcus	Mr. Khan supports students in focusing, redirecting them on academic task	Day 1: Class Discssion on data and sort graph and color data worksheet Day 2: As a focus on task activity, students color a CS Career coloring page during our Google Desk Talk virtual speaker Day 3: PostCS Career Pathways review - what did students like about the yesterday's virtual guest and what suggestions would they give Ron and Google to make the Google Desk Talks more engaging?
Debrief/Assessment **(We Do)**	Day 1: Love Letters for Computers: Data and Algorithms - Count & Graph Day 2: Students listen to presentation on Data from Google Desk Talk speaker and engage in Q & A with the guest. Day 3: Students discuss what they liked about the virtual Google Desk Talk with Ron and list 2 or 3 ways or things Google can do to improve the Google Desk Talks and make it more engaging for students		
Self- Assessment **(You Do)**	SEL-Mindful Check In: Mood Meter Check In Did you complete your tasks this period - did you participate? did you show good listening skills? were you respectful during the presentation? did you manage and self-regulate your behavior? How are you doing ? Do you need a break? Would you like to go for a walk? Would you like to color? Do you need help completing the task? Remember you are working on earning all your points this period on your point sheet? Did you earn all your points this period? Did you earn your Classcraft Points for Technology-CS this period? Classcraft - Our Approach		

Lesson Pacing: (Planning / Pre-arranged)	Student to Student Interaction: (Planning / Pre-arranged)	Student Directed Learning: (Planning / Pre-arranged)	Assessment / Data Collection

Anticipatory set (buy in), visuals (What is going to grab the attention of each student) Positive demeanor Setting **clear** expectations: Visual cues present in room. Areas labeled. Protocols: Method of transition (how do the students get up, move from place to place, begin work). Transition cues (symbols, verbal cues, nonverbal)	Verbal dialogue/debate Symbol exchange Students in charge of calling on peers Student jobs Turn and Talks Think Pair Share	Student initiating communication (scripting, symbols, dialogues) Providing contrived opportunities for communication Group work Highly motivating objects / activities	Summative assessments (tests, quizzes, performance tasks, debates) Formative assessments (check sheets, data sheets, probe data, exit slips, student self-assessment checks, question and answer

Verbal and/or nonverbal cues in place to check for understanding of expectation. Schedules: whole class and individual Receptacles to check in to where you are going. Timers (audible and visual) / priming-letting students know the when If students are finished: transitional cue to move to pre-arranged preferred activity, enrichment area, rotating centers, work stations, academic choice. *These things are in place BEFORE students finish and students are aware. Motivational boards, Behavior plans Token economies, Turn Taking Boards Task analysis (break down of the task into smaller steps) Micro-lectures Differentiation / realistic expectations “Primacy-Recency effect” Whatever we hear first we remember best, whatever we hear last, we remember second best.	KWLs Small group Competition/games Movement Variety of different ways to express answers (white boards, manipulatives, hand signals, etc.) Student clubs Strategic seating Peer buddies Students teaching students Peer buddies	Utilizing student interest inventory Providing student choice KWL, Debate, Songs Oral presentation, Acting Technology Problem solving Competitions, Games Shared reading Writing Independent reading Graphic organizers	



Mini-Lesson	Work time	Debrief
• Read aloud • Vocabulary review • Introduce a problem or situation • Video clip, song, poem, etc... • Reader's Theater • Graphic organizer • Teaching/Practice of specific skill	• Independent reading/ responding to reading • Research • Stations • Investigation/hands on activity, experiment • Problem- solving • Computer game, virtual field trip, etc... • Meet with teacher	• Clear up misconceptions • Reflect • Share • Assess • What does today's work have to do with bigger picture?