

Grade 2: Module 1: Labs

1 – Launch Stage

Labs: Launch Stage**Days 1–4**

Each of the Labs unfolds across an entire module and takes place in four stages: Launch, Practice, Extend, and Choice and Challenge.

1. The Launch stage serves four purposes:

- To introduce and practice the Lab schedule and routines and lay the groundwork for the habits of character that students will practice in each Lab.
- To orient students to the purpose, guiding questions, and materials of each of the Labs for this module.
- To establish expectations for each Lab.
- To build a sense of wonder and excitement about each Lab. Students should be filled with anticipation, questions, and ideas as they continue on to the next, more independent stages of the Labs.

Each Lab launches with a whole group experience and does so on a separate day, so students can experience a full immersion into each Lab.

During their In the Lab time, students break up into smaller Lab groups and go to separate workstations (tables or other workspaces around the classroom).

This structure creates a small collaborative atmosphere in which students will work throughout their Labs experience. It also supports the management of materials (since each workstation has its own materials).

The chart below shows the guiding question, learning target(s), and ongoing assessment for each Lab during this specific stage.

(Note: The guiding question for a given Lab remains the same for the entire module. In contrast, the learning target(s) become more refined and precise from stage to stage.)

**Launch Stage: At-a-Glance****Guiding Question****Create Lab**

How can I create a portrait of a person who is important to our school?

Engineer Lab

How can I design an ideal space for my school?

Imagine Lab

How can I use a world of play for myself and others?

Research Lab

How can I use research skills to learn about my classroom community?

Learning Target(s)

Create Lab

I can draw a self-portrait.

I can identify the features of a face, including the number of each feature.

Engineer Lab

I can draw an open-wall picture of my classroom.

I can use straightedges to create a more precise drawing.

Imagine Lab

I can show respect for Lab materials and my peers.

Research Lab

I can work collaboratively to create survey questions to learn about my classroom community.

I can work collaboratively to create a research plan.

Ongoing Assessment

Create Lab

Create Lab Checklist (**SL.2.1, SL.2.6**)

Engineer Lab

Engineer Lab Checklist (**SL.2.1, SL.2.6**)

Imagine Lab

Imagine Lab Checklist (**SL.2.1, SL.2.6**)

Research Lab

Research Lab Checklist (**SL.2.1, SL.2.6, W.2.8**)

Labs are one hour long in all four stages. During the Launch stage, this hour is divided as follows:

Practice Stage: Daily Schedule

Lab Component	Time
Storytime	10 minutes
Setting Lab Goals	5 minutes
In the Lab	40 minutes
Reflecting on Learning	5 minutes

Launch Stage: Storytime**10 MINUTES****Teaching Notes****Purpose:**

- The purpose and structure of Storytime is identical across all four stages of the Labs and can include a read-aloud of a text or an oral storytelling experience:
 - To increase the time students encounter complex text through read-alouds.
 - To build students' understanding of the structure of narrative and informational texts through read-aloud and oral storytelling.
 - To connect to the content of the Labs (and module), as well as to the habits of character that students practice during the Labs.
- Students benefit from seeing the text when it is read aloud. Consider displaying the text with a document camera. This is particularly essential if the illustrations are important or beautiful.
- Some students may benefit from time to verbally process a story as it is being read. Consider using discussion protocols such as Turn and Talk to allow them time to verbalize their understanding of stories. Do this judiciously, however; note that Storytime is only 10 minutes.
- During the Launch stage, choose texts that meet the following criteria:
 - Introduce students to various members of a school community
 - Show students, or other community members, being active, productive members of their community
 - Include a character who is getting to know a new space (e.g., a new home or classroom)
 - Celebrate the differences people have in their physical appearance (i.e., skin tones, faces, body types, etc.)

In advance:

- Choose a text from your own classroom library or the K–5 Recommended Text List (stand-alone document).
- Consider creating a focus question for Storytime (see example in the Experience section that follows).
- Create four heterogeneous Lab groups. Seat students in their Lab groups during Storytime and Setting Lab Goals for easier transitions and more focused discussions. Consider keeping the same Lab groups through the Launch, Practice, and Extend stages of Labs for this module.
- Review the Labs song.
- Post: Focus question (optional).

Materials

- ☒ Labs song (one to display)
- ☒ Text for Storytime (chosen by teacher; see Teaching Notes)

Experience (identical during all four stages of Labs)

- Gather students whole group by singing the (start of the) **Labs song**.
- Introduce the **text for Storytime**.
- Consider giving students a focus question with which you would like them to listen, especially as it supports their work in the Labs. (Examples: “While I read this story aloud, think about the ways in which the characters collaborate, or work together” or “While I read this story aloud, think about this question: How is the main character important to his/her community?”)
- Read aloud the text for Storytime slowly, fluently, and without interruption.

Launch Stage: Setting Lab Goals**5 MINUTES****Teaching Notes****Purpose:**

- Setting Lab Goals is a time to activate and reinforce students’ executive functioning skills: focusing their attention, making a plan for their time, exhibiting self-regulation, and following instructions. All students, but especially primary learners, need to learn and practice the behaviors associated with executive functioning.
- Consider using visual displays (anchor charts, a Labs schedule, a daily agenda, etc.) to support students in understanding and remembering where they are going that day and what is expected of them once they are there.

In advance:

- Post: Guiding question and learning target(s) for the Lab students will be launching that day (see detailed plans for each Lab on the following pages).
- Decide on a process for storage and distribution of Labs notebooks, pencils and clipboards (optional). Consider having students bring these materials to the carpet prior to Storytime, and having them place them beneath their legs so they are not a distraction until they are needed.

Materials

- ☑ Learning target(s) (one to display for each Lab; see Launch Stage: At-a-Glance for the specific targets for each Lab)
- ☑ Labs notebook (one per student)
- ☑ Pencil (one per student)
- ☑ Clipboard (one per student; optional)

Experience

- Welcome students to Labs! Tell students that “Lab” is short for “laboratory.”
- Ask:
 - * *“What happens in a laboratory?” (Responses will vary, but may include: Scientists do experiments. People experiment to learn new things.)*
- Tell students that in Labs, they will do hands-on activities that will help them learn more about the topics they are studying in other parts of their day.
- Briefly introduce the Lab that the class will launch today.
- Ask students to Think-Pair-Share something they already know about the name of that Lab to help build background knowledge. (Examples: “Today we are launching the Engineer Lab. What do you already know about engineers?” or “Today, we are launching the Imagine Lab. What does it mean to imagine?”)
- Tell students they will work in small groups, called Lab groups, and today all groups will work on the same task. Students should already be seated in their Lab groups so they can begin to remember with whom they will be working and moving during Labs.
- Share the **learning target(s)** for the Lab the class is focused on today. Ask students to turn and talk about each of these questions with an elbow partner:
 - * *“What do you think you will be doing in today’s Lab?”*
 - * *“How can you show respect for materials?”*
 - * *“How can you show respect for other students in your group?”*
- Invite students to open their **Labs notebook** to the Goal Setting and Reflecting on Learning pages.
- Remind students of which day of the Labs it is. (For example: Today is Day 3 of Labs.)
- Invite students to use their **pencil** and **clipboard** to record their goal for one (or more) of the Labs they will be visiting today.
- Tell students that their most important goals for the day are to think about the learning target, show respect for materials, show respect for other students in their group, and have fun!
- Invite students to take out their imaginary bow and arrow and then stand up and take aim at the target.
- Invite students to put on their imaginary lab coats and goggles to show they are ready for learning and fun.

Launch Stage: In the Labs

40 MINUTES

- Refer to the In the Lab section on the following pages for detailed plans on each specific Lab.

Launch Stage: Reflecting on Learning

5 MINUTES

Teaching Notes

Purpose:

- The reflection portion of Labs serves as a bookend to Setting Lab Goals. Students both recall how they spent their time in the Lab and reflect on their experience in the Lab.
- This cycle of goal-setting and reflecting leads to greater intentionality by students as well as a sense of ownership in their learning.
- Students will have varying levels of experience with reflection. For those who may need additional support, consider using predictable structures of reflection (such as protocols) as well as familiar sentence frames to support English language learners.

In advance:

- Post: Sentence frames or picture clues for any reflection questions you will use regularly (optional).

Materials

- ✓ Labs notebook (one per student)
- ✓ Pencil (one per student)
- ✓ Clipboard (one per student; optional)

Experience

- Gather students back together whole group by singing the (conclusion of the) Labs song.
- Remind students of the guiding question for the specific Lab the class focused on today.
- Invite students to open their **Labs notebook** to the Goal Setting and Reflecting on Learning page.
- Ask students to quietly read the goal they set during Goal Setting that day.
- Ask a reflection question, giving students think time before they respond. This promotes more considerate responses and supports English language learners. Examples:
 - * *“What is something you did really well in the Lab today?” (Responses will vary, but may include: I helped clean up my workstations.)*
 - * *“What is something you struggled with in the Lab today?” (Responses will vary, but may include: I do not think my picture looks exactly like our classroom. It was hard to draw it from the side.)*
 - * *“How did you get past a difficult obstacle?” (Responses will vary, but may include: I looked back at the model picture to help me remember what an open-wall viewpoint picture looks like.)*
 - * *“What is something you want to do better during Lab time tomorrow?” (Responses will vary, but may include: I want to be able to add more details to my drawing.)*
 - * *“What was your favorite part of the Lab today? Why?” (Responses will vary, but may include: I really like making a self-portrait and finding all the details of my face.)*

- Invite students to use a silent signal to indicate when they are ready to share.
- Invite students to share with a partner, a small group, or the whole class, as time permits.
- Continue to reinforce specificity in students' responses (e.g., referring back to their goal, referring back to the learning target(s), giving concrete examples, etc.).
- Invite students to use their **pencil** and **clipboard** to complete the Reflecting on Learning portion of their Lab notebook for that day.
- Invite students to give a neighbor a high-five and take off their imaginary lab coat and goggles to indicate the end of the Lab experience.



Launch Stage: In the Create Lab

Guiding Question

- How can I create a portrait of a person who is important to our school?

Learning Targets

I can draw a self-portrait.

I can identify the features of a face, including the number of each feature.

Teaching Notes

Purpose:

- In the Create Lab, the Launch stage serves two purposes:
 - Students identify the various features that make a face.
 - Students become familiar with the different numbers of features of their own face.

Habits of character:

- The Create Lab intentionally avoids the use of some traditional drawing supports such as stencils or tracing materials. Instead, students create their own “Artist’s Toolbelt” of skills. This promotes their independence and self-efficacy as artists and learners.
- During the Launch stage of the Create Lab, students build the habit of character of perseverance as they work through multiple drafts of their drawings.

Logistics:

- The lesson portion of the Create Lab during the Launch stage will be slightly longer than normal to provide students with some necessary background knowledge and skills for later success and independence.
- During the Launch stage of the Create Lab, Lab groups visit one workstation for 30 minutes.

In advance:

- Prepare four workstations by placing pencils, paper, and mirrors at each workstation for students to draw their faces.

- Consider:
 - Labeling each workstation (with a name or number) to assist students in transitioning.
 - How to store students' projects, since some students may continue to work on the same project for several days or weeks.
- Determine the signal (bell, word, silent signal) you will use throughout Labs to let students know when it is time to clean up their station.

Materials

- ☑ What Makes a Face? anchor chart (new; co-created with students)
- ☑ Mirror (one per student and one for teacher modeling)
- ☑ Chart paper (one piece; used by the teacher to create a model drawing)
- ☑ Paper (blank; one piece per student)
- ☑ Pencils (one per student or a cup of pencils per workstation)

Experience

- Reinforce for students that as the Labs progress, they will think about people who are very important members of their community. They will complete an art project in the Create Lab to celebrate these community members.
- Tell students that before they begin this project, they will practice important art skills that will help them create high-quality work.
- Tell students that in the Create Lab, they will build their own "Artist's Toolbelt." This is not a real belt that they wear, but it is a set of skills that artists have to help them create beautiful art.
- Pretend to put on an imaginary toolbelt and invite students to dramatically do the same with you.
- Tell students that they are going to be a very specific and special type of artist: a portrait artist.
- Ask:
 - * ***"What do you already know about portraits or the word portrait?" (Responses will vary, but may include: Portraits are pictures of people; they are pictures of people's faces; a portrait can be a photograph, a drawing, a painting.)***
- Tell students that the first tool portrait artists add to their toolbelt is features. Define features as "any of the different parts that make a face."
- Pretend to hold the idea of "features" in your hand and add it to your toolbelt. Invite students to do the same.
- Tell students they are going to work with an elbow partner to try to list all the features they see on their partner's face. Post and review the following sentence starter: "I see ____." Tell students that as they list the features on their partner's face, they should use numbers to indicate how many of each feature they see. Provide examples: "I see one nose. I see seven freckles. I see two eyes."

- Acknowledge that it may feel uncomfortable having another person look very closely at your face. Therefore, it is especially important that we are respecting our partners by giving them appropriate body space and using kind, specific words as we do this.
- Consider modeling with a student volunteer, with an emphasis on using kind, specific words and taking turns.
- Answer clarifying questions.
- Invite students to sit cross-legged, knee-to-knee, facing an elbow partner. Remind students that when they work with partners they show respect to their partner in many ways, including working happily with anyone, using kind words, and taking turns.
- Tell students they will have 30 seconds each to verbally list as many features as they can.
- Invite students to begin working.
- Circulate and support students as they work, identifying and numbering features. Take note of the ideas students are sharing and identify a few students to share out with the whole group.
- After about 30 seconds for each student, refocus whole group and direct students' attention to the **What Makes a Face? anchor chart**.
- On the chart, draw the blank outline of a face, telling students that one way to think about the shape of a face is like "an upside down egg."
- Give students specific positive feedback on working with their partners making their list of facial features. (Example: "I loved hearing students use factual, specific, and non-judgmental language while listing facial features.")
- Call on student volunteers to share a facial feature they listed with their partner. When a partnership shares, add that feature to the face and label it. Invite students to point to that feature on their own face (if appropriate).
- Continue this process until the What's in a Face? anchor chart shows the majority of relevant facial features students will need in their own drawings.
- Tell students that they will begin their journey as a portrait artist by drawing a face with which they are already very familiar: their own! When an artist draws his or her own face, it is called a self-portrait.
- Ask:
 - * ***"How can you be sure that you accurately include all of your facial features in your self-portrait?" (look at a picture; look in a mirror)***
- Tell students that today and over the next several days, they will use a mirror to help them draw their self-portraits. This will help them to draw their face more accurately.
- Tell students that they will repeat the process of closely looking at and numbering features, but this time they will use a mirror to look at their own face. They will use their findings to create their self-portrait.
- Use a **mirror** and **chart paper** to model this process in front of students.
 - Begin with the blank face, and after naming a facial feature ("I see two eyebrows"), add it to the self-portrait. (It is not necessary to model a full self-portrait, but just enough for students to understand the process.)
- Direct students' attention to the four workstations around the room and the materials at each workstation: **paper**, **pencils**, and mirrors.

- Tell students they will travel with their Lab groups to one workstation today, and they will spend 30 minutes there.
- Explain that when students arrive at a workstation, they will first look in the mirror and identify the features on their face. Then, using these different features, they will begin to draw their self-portrait.
- Tell students you will use a signal (bell, word, silent signal) to let them know when it is time to clean up their station. Then, you will use the signal again when it is time to return to the whole group.
- Consider inviting students to model this process, and then practice it as a whole class. (It will be important for students to internalize this routine as they move on in the Labs experience.)
- Assign each Lab group to one of the workstations.
- Invite students to begin working.
- Circulate and support students as they work. Coach students specifically in the areas of facial features and sizes:
 - Help students to see and include facial features they may be overlooking (e.g., eyelashes, eyebrows, freckles etc.).
 - Help students with the size of facial features, as this can be tricky for young learners. Encourage them to use their index finger and thumb (like pincers) to approximate the size of a facial feature, beginning on their face and carrying the size directly onto the page.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: “I love that I see this Lab group neatly putting away their papers so they can continue working on them later.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.
- Invite students to point to their favorite part of their own face as they walk back to the whole group area (e.g., point to your nose, point to your eyes, etc.).



Launch Stage: In the Engineer Lab

Guiding Question

- How can I design an ideal space for my school?

Learning Target

I can draw an open-wall picture of my classroom.

I can use straightedges to create a more precise drawing.

Teaching Notes

Purpose:

- In the Engineer Lab, the Launch stage prepares students to draw an open-side drawing of a physical space.

Habits of character:

- In the Engineer Lab, students focus on goal setting and reflection. The goal of creating a realistic drawing of their classroom is a set, shared goal; however, their honest reflection of their own work, as well as helping another student reflect on his or her work, is an individually developed skill.
- It will be important to practice this as students move toward the Choice and Challenge stage, when they will be expected to work through multiple drafts and make multiple revisions for their final product.

Logistics:

- During the Launch stage of the Engineer Lab, students work in their Lab group at one workstation for 40 minutes.

In advance:

- Create an open-side drawing of a familiar space within the school (another classroom, library, cafeteria, etc.).
- Prepare workstations by placing paper, pencils, and rulers at each workstation for students to draw an open-side drawing.
- Consider:
 - Providing copies of the model drawing at each workstation for students to reference while working.
 - How to store students' projects, since some may continue to work on the same project for several days or weeks.

Materials

- ✓ Model drawing (new; teacher-created; see Teaching Notes)
- ✓ Paper (blank; several pieces per student)
- ✓ Pencils (one per student or a cup of pencils per workstation)

- ✓ Rulers (one per student or a cup of rulers per workstation)
- ✓ Clipboards (one per student)

Experience

- Tell students that in the Engineer Lab, they will think a lot about the different spaces of their school.
- Invite students to close their eyes and think about their day at school, from the time they arrive to the time they leave. Specifically, ask students to think about all the different spaces within and around the school that they visit throughout the day.
- Using a total participation technique, invite responses from the group:
 - * *“What are some different spaces in which you spend time in our school?” (classroom, library, cafeteria, playground, art room, etc.)*
- Tell students that their skills as an engineer are going to begin with the space they know best: their classroom.
- Direct students’ attention to the learning targets and read the first one aloud:
 - *“I can draw an open-wall picture of my classroom.”*
- Tell students that they will draw in a style called “open wall” because they will imagine the classroom space from one side of the room, as if they were looking in through an open (or invisible) wall.
- Using a document camera, display the **model drawing**. Give students a few moments to study the drawing, but do not identify the school space it depicts.
- Invite students to turn and talk to an elbow partner:
 - * *“What school space are we looking at? How do you know?” (Responses will vary, but may include: It’s the library! I see the work tables in the middle, and the rows of bookshelves.)*
 - * *“Which wall did the engineer ‘open up’ and look through to make this drawing?” (Responses will vary, but may include: the back wall, the wall with the door, etc.)*
 - * *“What tools do you think the engineer, or creator, of this drawing needed?” (pencil, ruler, straightedge)*
- Reaffirm the idea that engineers’ drawings differ from some other forms of drawing because they are trying to be precise. To achieve this precision, they use tools beyond their pencil and paper, such as rulers or other straightedges.
- Direct students’ attention to the learning targets and read the second one aloud:
 - * *“I can use straightedge to create a more precise drawing.”*
- Shows examples of straightedge tool, such as a **ruler**, students.
- Invite students to turn and talk to an elbow partner:
 - * *“If you were to draw our classroom, which wall would you ‘open’ to look through? Why?” (I would look through the wall with the clock; that way, I could really see the classroom library, and I want to include that.)*
- Invite students to go stand against the wall they chose as their “open wall.”
- Once students have chosen a wall, invite them to find a partner or triad at that same wall.

- Invite students to turn and talk with their partner or triad:
 - * *“When drawing from your perspective, or place in the room, what do you see? What details would you include in your drawing?” (the classroom windows, the teacher’s desk, the bookshelves, the carpet, the clock, the white board, the math supplies)*
- After students have had a chance to discuss with their partner or triad, pause their conversations and ask:
 - * *“Look again. This time, work with your partner(s) to try to find all of the straight lines you can see from your perspective. What lines of the room will you need to use a ruler or straightedge to draw like an engineer?” (the edges of the bookshelves, the sides of the windows, the hands on the clock, the legs and tops of the desks)*
- If time allows, consider rotating students once or twice to different walls of the room, giving them multiple possible perspectives of the space.
- Invite students to return to the whole group area.
- Direct students’ attention to the four workstations around the room and the materials at each workstation: **paper, pencils, rulers, and clipboards.**
- Tell students they will travel with their Lab groups to one workstation today, and they will spend 40 minutes there.
- Explain that when students arrive at a workstation, they will take one piece of paper, one pencil, one ruler, and one clipboard from the workstation.
- They will then find a spot on the classroom floor or in a chair with their back to the “open wall” from which they are drawing. This way they can see all the details they want to include.
- Invite students to “switch on” their engineer brains by flipping an imaginary switch on their heads. Tell them that this is a designing, building, and problem-solving brain.
- Direct each Lab group to their workstation.
- Invite students to begin working.
- As they work, remind students that they do not need to finish their project today. They will return to the Engineer Lab many times over the next days and weeks.
- Circulate and support students as they work, focusing on their sharing and caring for materials.
- If students finish one drawing, encourage them to try again from a different perspective, looking through a different “open wall.”
- Remind students of the importance of perspective at this point. It can feel frustrating to draw something multiple times, but repeated practice is how people improve their skills and move closer to their goals.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: “I notice this Lab group is handling each material carefully as they put it away. This keeps the materials in good shape for the next group that works here.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Launch Stage: In the Imagine Lab

Guiding Question

- How can I use my imagination to create a world of play for myself and others?

Learning Target

I can show respect for Lab materials and my peers.

Teaching Notes

Purpose:

- In the Imagine Lab, the Launch stage serves two purposes:
 - Students are introduced to the purpose of the Imagine Lab.
 - Students are given time to freely explore the various materials they will use in the Imagine Lab and begin to formulate ideas about how they might use these materials more purposefully in the future.
- As the Imagine Lab continues into later stages, students' experience becomes more directed and focused toward module-specific content knowledge and literacy skills.

Habits of character:

- The Imagine Lab incorporates multiple types of materials to allow students to create a world of play for themselves and others. Respect for these materials and respect for peers is necessary for the success of the Imagine Lab.

Logistics:

- During the Launch stage of the Imagine Lab, students work in their Lab groups and rotate among four workstations, spending 10 minutes at each. Since students are at each workstation for only 10 minutes, they have a limited amount of time to be introduced to each material.

In advance:

- Prepare workstations, each with a different type of imaginative play material that will be housed in the Imagine Lab (other possible materials might include modeling clay, common kitchen materials and safe cooking utensils, and felt or magnet boards):
 - Workstation 1: building blocks (one set of wood or linking blocks)
 - Workstation 2: white board (one large to share or several small) and dry erase markers (one per student)
 - Workstation 3: hand or finger puppets (several to share)
 - Workstation 4: dress-up materials (several to share)
- Consider labeling each workstation with a name or number to assist students in transitioning from one to the next.

Materials

- ☑ Workstation materials (for students to use to create a world of play for themselves and others; see Teaching Notes)

Experience

- After setting goals for the Imagine Lab, consider walking students as a whole group to each workstation. Remind them that each Lab group will visit all four workstations.
- While at each workstation:
 - Review the proper use and care of materials as well as the way materials should be stored when students are finished.
 - Invite students to share their ideas of what they might imagine or what they might play when using that workstation's materials.
- Consider suggesting imaginative play ideas based on the anchor texts of the module. (Example: Students might consider playacting characters from literary texts they are reading during the module lessons.)
- Assign each Lab group to one of the workstations.
- Tell students that today they will have 9 minutes of exploration time at each workstation. Invite them to begin exploring and imagining.
- As students work, circulate and support them, specifically in the area of respect toward materials and peers.
- After 9 minutes, give the cleanup signal. Take a quick survey of each workstation to be sure students have carefully stored all materials and are ready to rotate.
- Remind students which workstation they will visit next. Invite them to rotate.
- Repeat this process until students have visited each of the four workstations.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: "It's wonderful to see this group storing materials neatly where they found them.")
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Launch Stage: In the Research Lab

Guiding Question

- How can I use research skills to learn about my classroom community?

Learning Target

I can work collaboratively to create survey questions to learn about my classroom community.

I can work collaboratively to create a research plan.

Teaching Notes

Purpose:

- In the Research Lab, the Launch stage serves three purposes:
 - Students are introduced to the purpose of the Research Lab.
 - Students learn to formulate research questions to learn about their classroom community.
 - Students become familiar with the process of conducting a survey as a tool for original research.

Habits of character:

- The Research Lab is highly collaborative. Students work with a research partner throughout the research process: formulating a research question, planning a survey, conducting a survey, creating a visual representation of their data, and reflecting on data.

Logistics:

- During the Launch stage of the Research Lab, students work with a partner to formulate several possible questions about which they could conduct original research on their classroom community.
- Students choose a research question for which they will complete the research process.
- Students prepare their survey materials and choose their individual roles and responsibilities for the Practice stage.

In advance:

- Create supportive research partnerships. Consider partnering students with complementary strengths (for example, one student who is confident to verbally interact with others in the gathering of data with another student who is more confident with recording data as it is collected).
- Prepare research plans (see supporting materials).

Materials

- ✓ Labs notebook (from Launch stage; one per student and one for teacher modeling)
- ✓ Pencils (one per student)
- ✓ Clipboard (one per student)

Experience

- Gather students in the whole group area. Seat them next to their predetermined research partners.
- Using a total participation technique, invite responses from the group:
 - * ***“What does it mean to research?” (to read or learn more about something, to find out more information about something)***
- Tell students that it is important that members of a classroom community learn about one another, especially at the beginning of a school year. For this reason, they will be researching each other!
- Direct students’ attention to the learning targets and read the first one aloud:

- ***“I can work collaboratively to create survey questions to learn about my classroom community.”***
- Using a total participation technique, invite responses from the group:
 - * ***“What does it mean to do something collaboratively?” Consider connecting this to the word collaborate if students do not make this connection on their own. (to work together)***
- Tell students that the person sitting next to them is their research partner. They will work with this research partner throughout their experience in the Research Lab.
- Invite students to turn to their research partner, shake hands, and greet one another with a “Howdy, partner!”
- Using a total participation technique, invite responses from the group:
 - * ***“What do you already know about the word survey?” (collecting information on a particular topic from a small group of people)***
- Tell students that in the Research Lab, they will do just that: ask questions to learn more about individual members of their classroom community and their class as a whole.
- Invite students to turn and talk to their research partner:
 - * ***“What are some questions we can ask members of our classroom community to help us know each other better?” (Responses will vary, but may include: How do you get to school in the morning? How many siblings do you have? What’s your favorite kind of book?)***
- Invite a few volunteers to share their questions whole group.
- Using a document camera, display the research plan within the Labs notebook.
 - Display the first page of the research plan.
 - Tell students they will use a template to create a research plan with their partner to help guide them through the research process.
 - First, they will work with their partner to brainstorm some possible survey questions. Remind students that their survey questions should help them to learn about their classroom community.
 - Model recording students’ shared questions in the “We are curious” section of the displayed research plan.
 - Display the second page of the research plan.
 - Tell students they will discuss all three of their brainstorming options with their research partner and collaborate to choose one question for which they will complete a survey of all the students in their class.
 - Tell students that they need to choose a research question for which there can be multiple answers. Examples: “What is your favorite color?” or “What kind of pet do you have at home?” Non-examples: “What is your mom’s name?” This is important because, when they conduct their survey, other students will choose from a list of possible answers.
 - Model recording a final research question on the research plan. (Example: “What kind of pet do you have at home?”)

- Ask:
 - * *“What are some likely answers people might give for this question?” (dog, cat, fish)*
 - Model recording possible likely answers in the appropriate lines.
 - Finally, tell students that they will work with their research partners to choose their jobs. On one day, a partner will do the talking (asking the survey question to other students), and both partners will record the responses. On the next day, the other partner will do the talking, and both partners will record the responses.
 - Tell students that they will most likely have the chance to go through the research process more than once.
- Distribute a **pencil** and a **clipboard** to each student.
 - Invite them to move to a quiet area of the classroom and start working.
 - Circulate and support students as they begin brainstorming with their partners. If students finish, encourage them to complete a second research plan so they will be prepared to go through the process more than once.
 - At the conclusion of In the Lab time, signal students to clean up and store their research plans.
 - As partnerships are ready, transition them back to the whole group area for Reflecting on Learning.