

Scholarly Dispositions

LESSON A: DEVELOPING AN INTEREST (I)

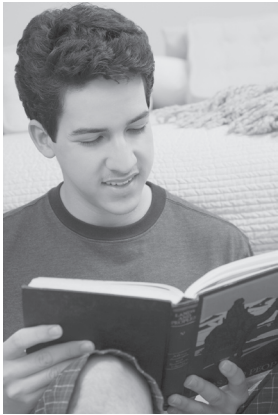
PCM Focus: Developing an interest

Objective: Students will develop an understanding of how interest can be developed and nurtured by the individual's actions.

MOTIVATE

Present the 🏛️ big idea and the following pictures to the students:

Being interested is a natural phenomenon or activity.



Refer to the pictures to hypothesize and test the meaning of the 🏛️ big idea or theoretical statement. For example, students could respond that the interests of the Curious Bear are food, the feel of the metal on the trash can, and so on.

Generate a list of possible interests depicted by each picture:

Curious Bear	Scientific Curiosity	Studious Boy



ACTIVATE PRIOR KNOWLEDGE




Discuss the meaning of an “inventory” and the multiple reasons and places for taking or making an inventory: at retail stores to determine merchandise stock, in the classroom to ascertain available supplies, etc.

Have students take an inventory of the inside of their desks.

Introduce the following form for students to conduct their own interest inventory. Provide opportunities for students to share their inventories.

Compare the Interest Inventory to other types of inventories.

Ask students to prioritize interests in each category with regard to  details such as time, resources, and effort. Discuss how and why interests change  over time.

Interest Inventory		
At Home 	At School 	At Play 
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
Prioritize 1. 2. 3. 4.	Prioritize 1. 2. 3. 4.	Prioritize 1. 2. 3. 4.

RELATIONSHIP TO PCM

Core Curriculum

Literature—Identify behaviors of fiction or nonfiction characters that exemplify “interest.”

Create a chart for articulating the various interests of the characters found in different genres. Note the example of a completed entry on the chart.

Literary Characters' Interests

Genre	Characters	Interest	Effects of Interest
Fairy tale	Goldilocks	Exploring food to eat	Deciding which food was "just right" for her to eat

Use the completed chart to identify  patterns depicting the interests of characters in different genres.

Curriculum of Practice

Discuss the steps in the process of problem solving:


- Define the problem
- Gather information
- Organize information
- Select a solution

Acknowledge the value of problem solving in a chosen discipline. Research the role of interest for a disciplinarian to problem solve in that discipline.


Use the graph-type chart to record and display the degree to which the chosen disciplinarian in the selected discipline invests interest in each step of problem solving. Instruct students to color in the degree each step is used by the disciplinarian to problem solve.


Disciplinarians				
Steps	Disciplinarian			
	Degree of Interest ----->			
Define the problem				
Gather information				
Organize information				
Select a solution				

Curriculum of Connections

Reintroduce the  big idea and have students apply it to each of the areas they are studying to find evidence that support it.

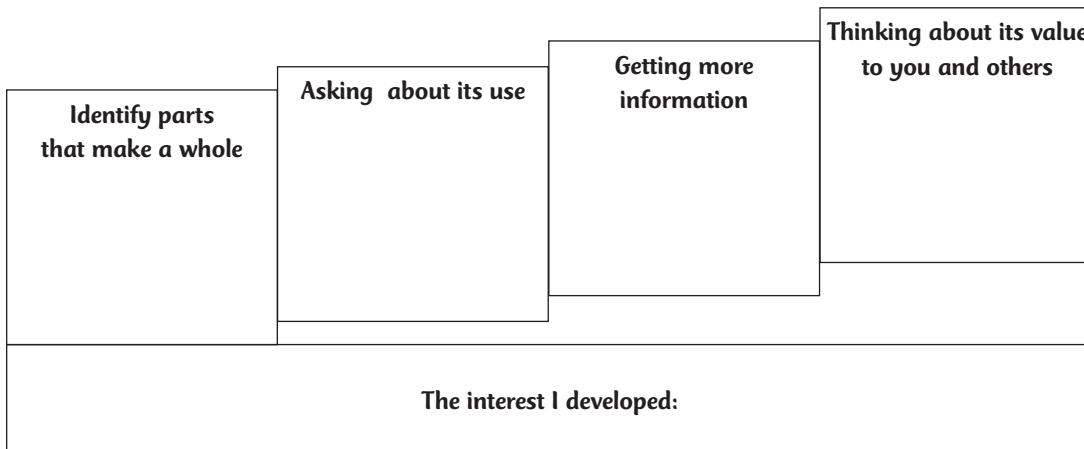
Being interested is a natural phenomenon or activity.

Complete a chart as a class to support the  big idea using examples from the topics currently under study in the curriculum. (Note the example on the chart.)

Building Evidence to Support the  Big Idea				
Example	↑	Reading mythology	↑	↑
Example	↑	Using a telescope	↑	↑
Topic	↑	Astronomy	↑	↑
Topic	↑		↑	↑

Curriculum of Identity

Ask students to discuss ways in which they build an interest, using the diagram as a means to prompt discussion.



Instruct students to maintain a journal describing their commitment to “develop a *new* interest.” Discuss the implications of the interest short and long term (⦿ over time) and for different contexts: schooling, recreation, leisure.

LESSON B: DEVELOPING AN INTEREST (II)

PCM Focus: Developing an interest
Objective: Students will be able to comprehend the value of developing and sustaining an interest.


MOTIVATE

Display the following set of pictures and ask students to formulate questions about what messages the pictures are communicating about people and their interests. Discuss when and why the students display similar behaviors of “being interested in something.”




Discuss the “what ifs” or the consequences of the episodes presented in the following scenes that illustrate devotion to an interest:


What if Henry Ford wasn't interested in cars?




What if Orville and his brother weren't interested in flying?



What if Marie Curie wasn't interested in chemistry?

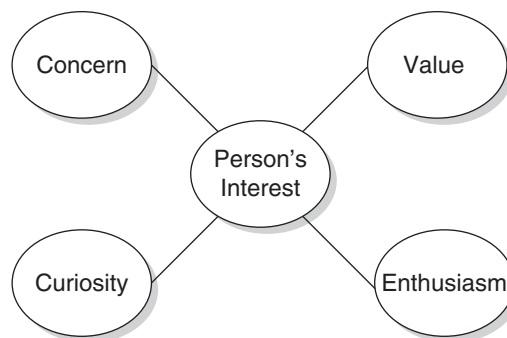


What if Steve Jobs wasn't interested in computers?



Introduce the collection of words that define “interest”—value, attentiveness, concern, enthusiasm, and curiosity.

Discuss the implications of these terms to the actions and behaviors of people who have been successful by completing the following retrieval chart.




Research additional information about an individual to describe the attributes that drove the person's interest.

ACTIVATE PRIOR KNOWLEDGE

Present the following Interest Indicator:

Interest Indicator				
1	2	3	4	5
Becoming aware of something	Valuing something	Recognizing how something “matches” you	Understanding how you benefit from something	Developing an interest: immersing oneself in something

Apply the Interest Indicator to a previously read biography or autobiography.

Discuss how the indicator could be a  pattern in developing an interest.

Identify how  trends influence interests.

Have each student apply the procedural steps of the Interest Indicator to one of their own interests.

RELATIONSHIP TO PCM

Core Curriculum

Research the means by which authors *stimulate interest* in a character, setting, and/or problem in a story by using words, actions, and interactions.

Curriculum of Practice

Read a biography on an inventor, scientist, author, or historical figure.

Research how the selected individual became interested in their field of study. Use the Interest Indicator to chart the individual’s experiences to develop an interest.

Interest Indicator				
1	2	3	4	5
Becoming aware of something	Valuing something	Recognizing how something “matches” you	Understanding how you benefit from something	Developing an interest: immersing oneself in something

Curriculum of Connections

Research how advertisements create an interest in different areas and then debate this statement: *The art of persuasion can stimulate interest.*

Curriculum of Identity

Discuss the concept that people are a composition of their interests: *How do our choices at school and at play reflect our interests?*

Instruct each student to create a collage or mosaic that is a personal reflection of the interests they have.

LESSON C: DEVELOPING TENACITY

PCM Focus: Developing tenacity

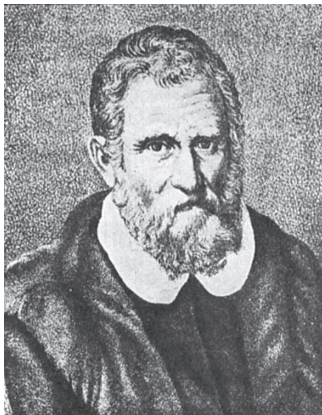
Objective: Students will be able to relate the importance of tenacity or task commitment to learning and academic success.

MOTIVATE

Use these endeavors of famous people as the backdrop for a discussion about a sense of industry or tenacity.



It took Michelangelo four years to paint the Sistine Chapel.



It took Marco Polo three years to travel the Silk Road.



It took twenty-one years to complete the Statue of Liberty, from an idea to a statue.

Discuss the relationship between time spent on a task and the value or appreciation attributed to the task.

Respond to the concept of tenacity in a question: How do we determine if the time spent on a task is worth the investment?

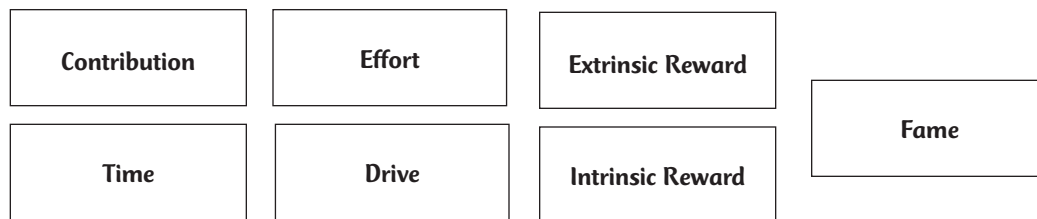
Relate the concept of tenacity to  patterns of behaviors. Discuss the effects of tenacity  over time and the  ethics involved in using one's tenacity.

Note examples of the  ethical issues in using one's tenacity:

- An individual who is so preoccupied with work that he/she does not have time to be with friends or to complete assigned chores.
- An individual who commits all his/her time to one subject but not to others.

ACTIVATE PRIOR KNOWLEDGE

- Provide students with this set of 3 × 5 cards:



- Inform students that each of these cards represents vocabulary or terminology related to how and why people are tenacious or stick to the task (task commitment).
- Refer to the following set of school-based experiences and ask students to identify which of the terms has most significantly affected their practice of tenacity during each of the tasks. For example, a student could respond that the tenacity exerted while “studying for a spelling test” is related to “Extrinsic Reward.”

A Day at School



- Studying for a spelling test
- Practicing addition and subtraction
- Examining cells under a microscope
- Researching in a book
- Writing a story

RELATIONSHIP TO PCM

Core Curriculum

Select a topic to introduce the students to the concept of writing an independent report.

Use the following chart for the students to continually record the degree of tenacity they have expended on each segment of their independent report.

Tracking Tenacity				
Name: _____				
Steps in the Report Project	Degree of Tenacity			Reason for Tenacity
	None	Some	A Lot	
Selecting a topic				
Developing questions				
Researching the questions				
Writing the report, with information that answers the questions				

Use the students’ Tracking Tenacity charts to synthesize how and why students use tenacity.

Curriculum of Practice

Discuss the statement that “tenacity is a necessary characteristic of many professions.”

Identify the degree to which tenacity is a required attribute in discipline-related professions and the ways tenacity is practiced by disciplinarians such as the following:

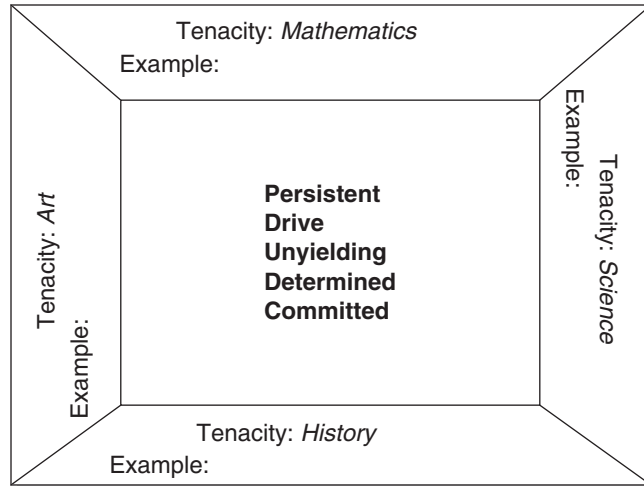
- Botanists
- Economists
- Geologists
- Historians

Introduce behaviors that reflect tenacity exhibited by disciplinarians:

- Tolerating ambiguity
- Waiting or exhibiting patience
- Working to resolve the unknown
- Digging for ✿ details

Curriculum of Connections

Present this set of words on a chart framed by the word *tenacity*.



Explain that the words in the center of the frame are synonyms for tenacity.

Find examples across the disciplines to illustrate the role tenacity plays in each discipline to complete the frame.

Instruct students to categorize the behavior descriptive of tenacity while performing various school-related activities. Compare the entries on this chart to the completed frame.

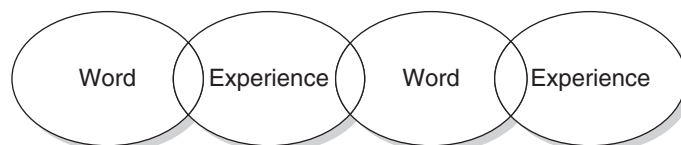
Activity	Problem Solving	Writing a Story	Playing a Game
	Behavior:	Behavior:	Behavior:

Curriculum of Identity

Discuss why and how tenacity is related to these proverbs:

- “Energy and persistence conquer all things.”
- “Without sweat and toil no work is made perfect.”
- “Keep your nose to the grindstone.”

Create a *tenacity chain*.



Instruct students to use the words that define tenacity in one circle and match the word with an experience that exemplifies the students' expression of tenacity in the second circle. Note that chains can be constructed to include experiences across various content areas or disciplines.

Discuss what has been learned about tenacity *and* its relationship to experiences in the disciplines from creating the tenacity chain.

LESSON D: DETERMINING RELEVANCE

PCM Focus: Determining relevance

Objective: Students will be able to define and describe the importance of the content and skills they have learned by determining the relevance of their learning experiences.

MOTIVATE

Refer to the following statements to stimulate a discussion focused on the concept of “relevance”:

WHY?

Why should I learn today about what happened in 1476?


Why should I learn to $+$, $-$, \times , \div if I have a calculator?

Why should I learn how to read when I can get books on tape?

ACTIVATE PRIOR KNOWLEDGE

Have students make a list of all the things they have learned in a day/week at school. Instruct them to prioritize or order the “lessons learned” with respect to the categories on this chart:

Lessons Learned			
What I learned:	1	Prioritizing what I learned by <i>interest</i>:	2
_____		_____	
_____		_____	
_____		_____	
_____		_____	
Prioritizing what I learned by <i>difficulty</i>:	3	Prioritizing what I learned by <i>importance</i>:	4
_____		_____	
_____		_____	
_____		_____	
_____		_____	

Define the  patterns of learning reflected by the priorities students have recorded.

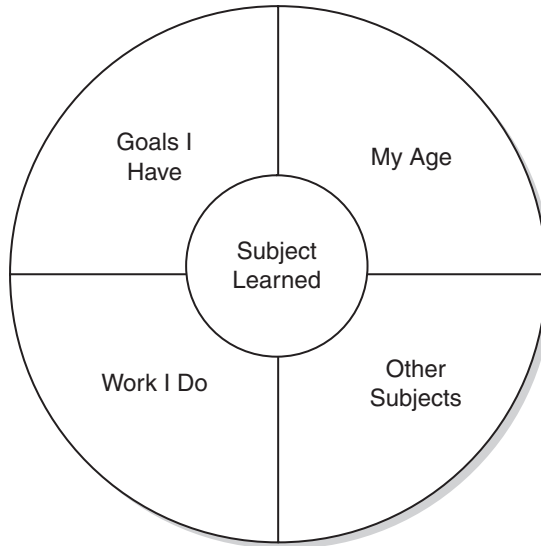
Discuss how and why priorities change according to different situations such as interest, difficulty of task, and time allocated to the task.

Relate the concept of *priority* to the concept of *relevance*. Answer the question: *What determines if something you learn is relevant?*

RELATIONSHIP TO PCM

Core Curriculum

Define the relevance or importance of a subject learned to different variables: age, goals, work that is required or assigned, other areas taught within the school day, and so on.



Curriculum of Practice

Discuss how the same body of knowledge has different values for different disciplines by coloring in the selected value on the chart.


Relevance				
What was learned: _____				
Its value to the disciplines:				
Level of Relevance	Science	Social Studies	Math	Language Arts
High				
Medium				
Low				

Use the completed chart to define the variability of the relevance of the same learned content or skill as it is used within the disciplines; identify the factors that cause this variability.

Curriculum of Connections

Find evidence to prove, validate, and/or support this  big idea:

The value of something is relative.

Encourage students to select at least two areas or topics in different disciplines to validate the  big idea. Demonstrate to the students how the value of a skill, such as “prove with evidence,” changes in different contexts. *Example:* “Prove with evidence” has a significant value in the study of density and a less significant value in creating or writing a story because . . .

Curriculum of Identity

Research the life of an author and inventor to support the concept that *information* has different values or relevance to different people depending on *why* and *how* the information is used.

LESSON E: CONFRONTING FAILURE

PCM Focus: Confronting failure
Objective: Students will develop an understanding of the positive effects of failure as a scholar and student.

MOTIVATE

Discuss how learning can take place in a variety of situations and conditions using these questions as prompts:

- How can you learn about plants from a garden just as you can learn about plants from a book in a classroom?
- How can you learn math while you are at a baseball game just as you can learn math from a problem on the whiteboard?
- How can you learn from someone who knows more or less than you?
- How can you learn from a mistake or error?

Identify the  details and  patterns reflecting the responses to the previous questions.

Discuss the positive characteristics or traits of failure. Ask students to define what can be learned from examining each of the following situations depicting “failure.”




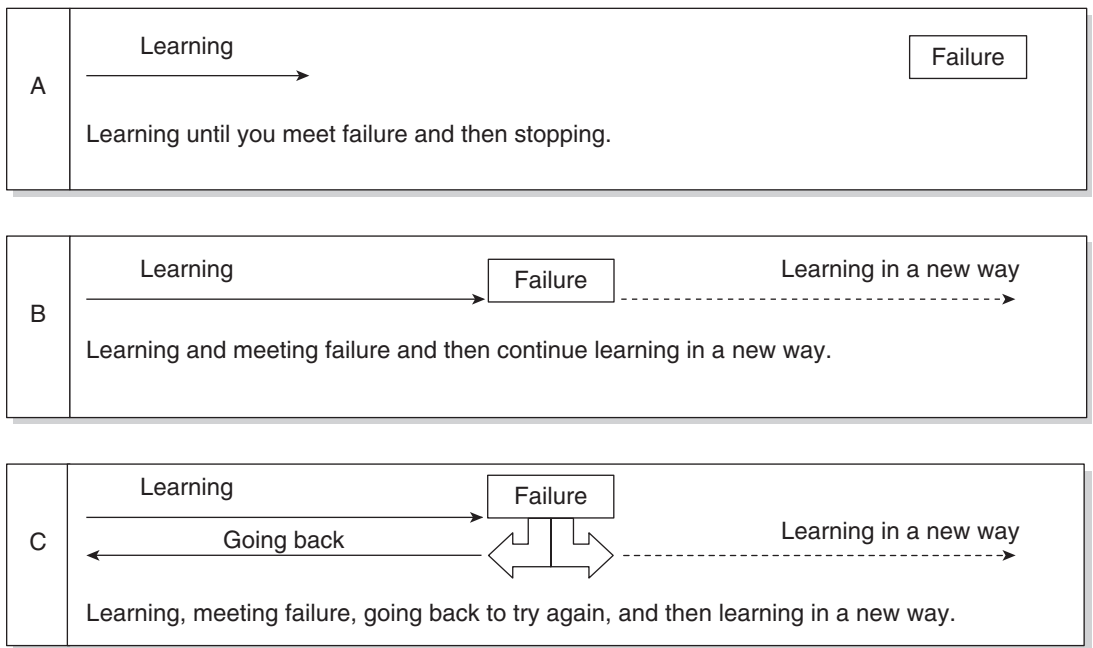
Present the  big idea as a statement:


Failure is a teacher.


Direct students to verify this statement using episodes from their own lives.




ACTIVATE PRIOR KNOWLEDGE

Introduce and discuss the following “Learning from Failure”  patterns:



Discuss the common characteristics found in each “Learning from Failure”  pattern: risk-taking, repetition, embarrassment, drive, rewards, tenacity, and self-concept.

Provide students with an opportunity to discuss “the times when” one or more of the “Learning From Failure”  patterns was a *real* event in the students’ lives.

Relate the concept that recognizing a  pattern of behavior affects one’s  perceptions of self  over time.

Facilitate a discussion with students so they can articulate when they are more “prone or susceptible” to failure in one subject versus another.

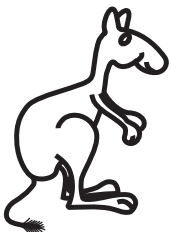
RELATIONSHIP TO PCM

Core Curriculum

Present the following set of fictitious work samples and use them to facilitate discussion related to these questions:

1. What is the error?
2. How can errors become a learning experience?

An Illustration of a Kangaroo



The teacher wrote: This is a well-developed kangaroo. Please redo the tail of the animal. It is not correct.

Math Problem

✓

1. $(3 + 3) + 2 = 8$
 $6 + 2 = 3$
2. $(4 + 5) = 6 + 3$
 $(2 + 2) + 1 + 5 = 10$

The teacher wrote: How can you check your answers? Review operational signs.

The Ocean

The ocean is like the wind.
It moves fast and high.

The teacher wrote: Is this analogy really clear?
Please rewrite.


Consider continuing the learning experience with anonymous examples of student work.

Curriculum of Practice

Play the YouTube “Famous Failures” to initiate a discussion about how individuals in their fields met failure and still attained success.

Introduce the  big idea:

Failure provides a new perspective.

Research a prominent individual to identify information that supports the idea that failure can be perceived from  multiple perspectives:

1. Failure as “closing the door” versus “opening the door” to opportunity.
2. Failure as a negative or positive influence in assuming a role or taking action.
3. Failure as the signature of a “winner” approaching something new.

Consider continuing the learning experience with anonymous examples of student work.

Curriculum of Connections

Instruct students to collect evidence across the disciplines to prove that *failure* is a universal experience.

Have students conduct investigations to show how failure led to progress in various ancient and contemporary cultures.

Curriculum of Identity

Reinforce the concept that we “learn from failure” and that “failure defines how we approach what we learn.” Use this scenario for promoting the discussion:

Imagine you are going to learn something new. How do previous failures shape your thinking and actions while learning this new “thing”?

Complete the chart to synthesize understanding of how failure influences our approaches to new learning.

Failure situation	What I learned from the failure	How the failure helps me learn something new

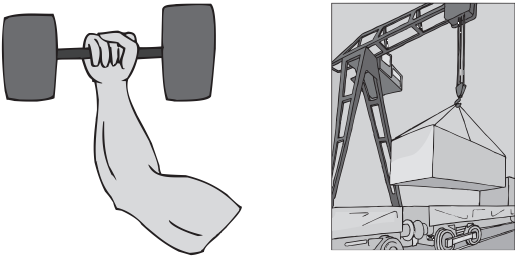
LESSON F: INTELLECTUAL STRENGTHS

PCM Focus: Intellectual strengths


Objective: Students will be able to relate the concept of “intellectual strength” to the specific attributes or traits that define potential, ability, and/or “giftedness” of the scholar or achiever.

MOTIVATE

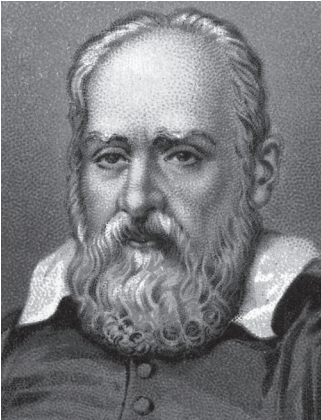
Present students with an array of pictures that show strength:



Discuss the feature each of these pictures has in common.

Introduce the relationship between physical and academic strengths and discuss the  language of the discipline: intellectual strength.

Prompt students to identify the intellectual strengths represented by the following people after reading their short biographies.



Galileo Galilei (February 15, 1564–January 8, 1642) was an Italian physicist, mathematician, astronomer, and philosopher who played a major role in the Scientific Revolution. He made improvements to the telescope, has been called the “father of modern observational astronomy,” “the father of modern physics,” and “the father of modern science.”




John Herschel Glenn Jr. (July 18, 1921–) is a former astronaut who became the first American to orbit the Earth. He flew aboard the space shuttle *Discovery* in 1998, becoming the oldest person to fly in outer space at age seventy-seven, and is one of the last surviving members of the Mercury Seven.



Emily Brontë (July 30, 1818–December 19, 1848) was a British novelist and poet. She is most often remembered for her only novel, *Wuthering Heights*, which is an English literature classic. She published under the masculine pen name Ellis Bell to evade contemporary prejudice against female writers.

Facilitate students’ understanding that intellectual strength is another way of describing tenacity or the specific talents, abilities, and skills a person possesses and continually uses. Relate the concept of intellectual strength to personal achievement or the attainment of goals as a consequence of the trait of tenacity.

Discuss how social, technological, economic, and political  trends affect the display and appreciation of a person’s tenacity.

ACTIVATE PRIOR KNOWLEDGE

Review the meaning of attributes, traits, and characteristics.

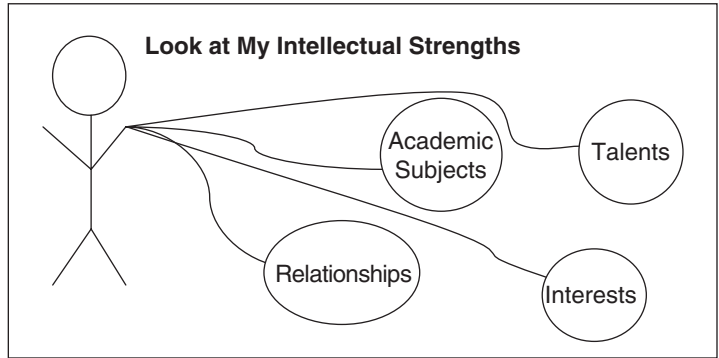
Describe how attributes can define intellectual strengths and how intellectual strengths are identified: tests, work samples, performances, opinions, or judgments by knowledgeable observers. Provide a set of scenarios wherein students can discern an individual’s intellectual strength(s).

Carlos picked up a pencil and began to “scribble” on the paper while he was waiting for his mother to finish shopping. A person walked by him and said, “My gosh, that’s an outstanding picture.” “Thanks,” said Carlos. “It’s just a scribble.”

Melissa wrapped her report about ants in a beautiful piece of paper. She wrote a note to her grandmother wishing her a “Happy Birthday.” She gave her report to her grandmother because she wanted her to see what the teacher had written on the cover of her report: *Your work about ants is excellent. Maybe you should consider becoming an entomologist.*

Use these “intellectual snapshots” to prompt discussions about the definition, exhibition, and consequence of using and recognizing intellectual strength.

Discuss how each person’s intellectual strengths form the total composition of the individual by having students compile a “strengths” chart illustrating their own intellectual strengths.



RELATIONSHIP TO PCM

Core Curriculum

Present characters from literature or history students have previously studied and instruct them to *both* identify and justify the “intellectual strengths” of these people or their ability to use their potential.

Create a class chart to synthesize the various illustrations of intellectual strengths. (Note the example included on the chart.)

Individuals	Intellectual Strength(s)	Evidence	Outcomes
Abraham Lincoln	Stated clearly a belief	Written speech	Changed people’s behavior




Curriculum of Practice



Conduct a real or imaginary interview by mail, telephone, or email to investigate how a selected person in a specialized field used one or more of their intellectual strengths to fulfill a task.

Provide students with a list of key questions for the interview:



Interview Questions

- When did you first notice your intellectual strength?
- What  details describe your intellectual strength?
- How do people react to your intellectual strength?
- What are people's  points of view about your intellectual strengths?
- What experiences  over time have helped develop your intellectual strength?

Share the students' data from interviews to identify common  details and  patterns about the use of intellectual strengths.

Curriculum of Connections

Provide students with an opportunity to discuss the following  big idea:

Intellectual ability can be viewed as positive and/or negative.


Encourage students to use the information collected about characters in literature or history to “take a position” on this statement and participate in a discussion or debate.

Have students write an autobiography to describe how an intellectual strength can become an asset or liability in different contexts or situations. Introduce contexts or situations that are academic as well as personal.

Curriculum of Identity

Present students with actions that are recognized outcomes of using intellectual strengths:

- Solve complex problems
- Anticipate or contribute to the future
- Summarize and apply new or different information
- Provide an alternate idea

Instruct students to describe how these actions influence the  patterns of behavior defined in historical “heroes and heroines.”

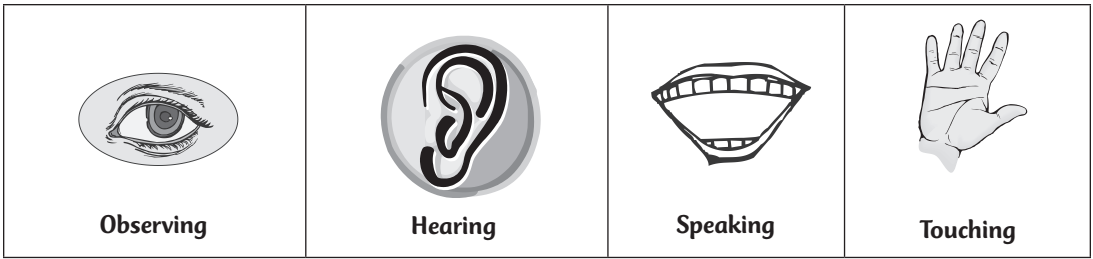
LESSON G: RECEPTIVITY TO EXPERIENCE

PCM Focus: Receptivity to experience

Objective: Students will develop an understanding of how to become receptive to learning experiences by assuming specific cognitive and affective behaviors.

MOTIVATE

Present the following poster to the students. Discuss the types of senses and their use for learning.



Ask students to match the following activities to the senses most relevant to them.

- Learning about rocks
- Learning to draw
- Learning about history by reading a book
- Learning about music

ACTIVATE PRIOR KNOWLEDGE

Make an analogy between constructing a puzzle and learning something new.



Cut out and use a set of puzzle pieces to illustrate kinesthetically how new learning fits into existing knowledge or learning.

Practice the concept with examples relevant to what students have learned and will learn. Underscore the fact that prior knowledge relates to or clarifies new information by making connections.

New Learning	Previous Learning	The Relationship
We will learn new things about Mars.	We know that explorers found or discovered a New World.	Explorations give new information.