

Topic/Lesson Title	Read Aloud with Accountable Talk: Starry Messenger (by Peter Sís)			
Date and Time	(Tuesday) March 15, 2018 (10:15- 10:55am)			
Author	Laura Battles			
Subject/Unit of Study	• Science: Earth and Space Sciences-Astronomy-The Moon Grade 1st			
	• ELA: Caldecott Honor narrative/historical fiction book Level			
	Socio-emotional: Self-Awareness and Social Awareness (e.g.,			
	the courage to disagree with and disprove prevailing views).			
Materials/Preparation	• Children's book <u>Starry Mesenger</u> (written and illustrated by Peter Sís- ©1996-			
	(ISBN#978-0-374-47027-2-Guided Reading Level: P -Lexile Level 830L)			
	ELMO/Document Reader and LCD Projector			
	Desktop computer with Internet connection for two extension activities			
MA Curriculum	• Science: 1-ESS1-1 (exposure to the moon's changing appearance and patterns)			
Frameworks/CCSS	• ELA: RL.1.1-RL.1.7/SL.1.1-SL.1.4/L.1.1-L.1.6			
	• Socio-emotional (SEL): Self-Awareness and Social Awareness (e.g., the courage			
	to disagree with prevailing views despite the consequences).			
<b>Essential Elements Met</b>	• 1.A.4 Well-Structured Lessons 1.B.2 Adjustment to	to Practic	е	
	• 2.A.3 Meeting Diverse Needs 2.B.1 Safe Learning	g Environ	ment	
	• 2.D.2 High Expectations 4.A.1 Reflective Pr	actice		

I. Lesson Learning Targets/ Head and Heart Learning Objectives: What do I want the students to learn, know, understand, be able to do?

By the end of this lesson, students will be able to:

- Participate in collaborative conversations about the children's book <u>Starry Messenger</u> in small and large groups, following agreed upon classroom rules for discussion.
- Ask and answer questions about key details in the text.
- Use key details to describe the illustrations, characters, setting, problem, and major events in the text.
- Ask and answer questions about vocabulary in the text, particularly words and phrases that suggest feelings or appeal to the senses.
- Label and recognize own and others' emotions.
- Predict others' feelings and reactions.
- Begin to describe observations about the moon's changing appearance.
- Understand that the invention of tools, such as the telescope, have improved our ability to observe and understand the world around us.

• Understand that Galileo Galilei, who is often called "the father of modern science", wrote down his observations in a journal and made detailed pictures to illustrate what he observed.

## II. Assessment:

How will I assess the students' understanding and/or skills to determine if the objectives/learning targets have been met? How will I observe? What will I look for? How will I encourage self-assessment on the part of the student? How will I lead the students to reflect on the content and nature of the experience?

Throughout the read-aloud portion of the lesson and each accountable talk moment (e.g., turn and talks with partner), I will make note of the students' questions and comments.

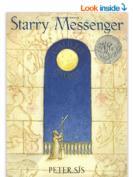
## III. Instructional Steps/Lesson Sequence:

a. <u>Connecting to or building students' prior knowledge/experiences; Engaging learners/setting the purpose:</u> How will I open the lesson? How will I activate the student's prior knowledge, experiences, or skills? How will the lesson build on their knowledge, experiences, and skills?

(10:15-10:20am)- This lesson will open with the students sitting on the rug next to their reading partners and my saying, "We've been learning a lot about the moon and how people have wondered about it since ancient times. In those early years of history, people used their senses to observe or notice things in nature, like the moon. They would notice the moon's appearance or the way it looks at different times and try to explain its patterns or phases with poems, songs, and stories. As people began to invent new tools, like the printing press to make books and the telescope to see things far away, they were able to deepen their understanding of the world around them. Today we are going to learn about a man named Galileo Galilei, who is often called "the father of modern science". He was VERY interested in the moon and his observations about the moon and space are the foundation of what we know today."

(10:20-10:25am)- I will then explain that I am going to read them a book called <u>Starry Mesenger</u> and that I will stop occasionally to ask them a question, which they will discus with their partner before reporting back to the whole class. After that, I will use the ELMO/document reader to show the students the cover of the book and ask them to describe the cover illustration and to make predictions about what they think the book might be about. I will then continue by asking the questions below:

- 1. What is the man on the front cover doing?
- 2. What's the name of the tool he is using?
- 3. Where and when do you think this story takes place? What makes you say that?
- 4. Who do you think the man is?



Time permitting, I may also show them the two-page illustration just inside the book, depicting the skyline of an Italian renaissance city at nightfall with one lone lit tower window where there is a man (presumably Galileo) looking up at the night sky and the stars with a telescope.

b. <u>Description of how the lesson unfolds</u>: What will I do (teacher moves)? What will the students do (student moves)? What questions will I ask?

(10:25-10:45)- Once we have finished with the above-mentioned pre-reading schema activation, I will then read the book, making sure to stop on the following pages to elicit the meaning/definition of a word and/or to pose a "Turn and Talk" question for the students to discuss with their partner:

Page	Vocabulary Clarification	Questions for Partners to Discuss
1	Revolved	
4	Scholars	
8	Thrived	
10	Physics	
12	Instrument	
14	Gazed & Telescope	
18	Inspired, "Maps of the heavens", & "Stars of Jupiter"	
22	Upholding the idea & Ancient philosophers	
23	Summoned to appear & the Pope	
24		What do you think Galileo should do?
26	Tried in the Pope's court & the stars had left his eyes	What do you think Galileo was feeling? Which zone do you think he was in and what makes you say that?
28	Condemned & still [Galileo's] ideas lived on	How did Galileos' ideas live on since he died way back in 1642?
30	[The church] pardoned him	

c. <u>Closure:</u> How will I end the lesson? How will I 'set the stage' for making connection from this learning experience to a past or future learning experience? How will ideas be synthesized?

(10:45-10:55am) Post reading Activities- Given the multi-disciplinary nature of this lesson, there are several different ways that this lesson could close. Time permitting, I will pursue the two below:

- (1) <u>Socio-emotional path</u>- "Turn and Talk" partners will be asked to discuss three questions about bullying: (a) Do you think Galileo was brave? Why? and (b) What should you do if you believe something that nobody else does and you can prove that it's true? Partners will then report back to the whole class.
- (2) <u>Science Path</u>- I will use the ELMO to share the journal that Galileo's actually used for his notes and sketches of the moon (see below). I will ask probing questions to learn what the students notice and wonder about these images of Galileo's journal and illustrations of the moon's appearance.

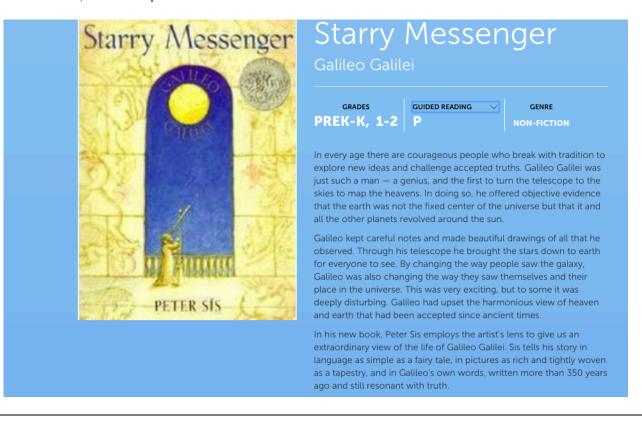


d. <u>Differentiation</u>: How will I meet the needs of a range of learners? Who needs what to make this lesson accessible and successful for all (IEP's, 504s, ELLs)

The main reason for using reading partners for the "Turn and Talk" moments is to make this lesson more accessible and successful for *all* learners. These reading partners have been working together since September so they are accustomed to each other and doing literacy-based work together. In addition, some learners feel more comfortable having a discussion with a partner before being asked to participate in a whole class discussion. Lastly, the particular vocabulary words I identified for clarification (see section b: How the Lesson Unfolds) were selected because they are challenging words for ELLs and for some students with IEPs. The post-reading extension activities are intended to appeal to different learning styles—the first for intrapersonal learners and the second for visual and/or artistically inclined learners.

e. <u>Social Justice Orientation</u>: How does this lesson respect and include individual student's cultural, socio-economic, racial backgrounds?

The text and illustrations of the children's book <u>Starry Messenger: Galileo Galilei</u> by Peter Sís depict the life of the scientist, mathematician, astronomer, philosopher, and physicist Galileo Galilei (1564- 1642) and the social-political climate of the era—aka-the Inquisition. In many ways, we are currently dealing with similar issues in that science is being denied and climate change ignored. The description below, retrieved from Scholastic, clearly expresses the social justice component of this book:



- f. <u>Technology Integration:</u> How was technology used in this lesson to enhance the learning experience? This lesson makes use of the following technology tools to enhance the learning experience of the students:
  - 1. ELMO/document reader
  - 2. LCD projector and desktop or laptop computer and Internet connection

## IV. Teacher Candidate Self-Reflection

a. To what degree were you successful in accomplishing the goals of this lesson?

I haven't taught this lesson yet so I am not sure to what degree I will be successful in accomplishing the goals of this lesson. Nevertheless, given that this lesson is part of my UBD Unit (e.g., "The phases of the Moon") and will take place during my lead teach experience I will have the opportunity to do pre, during, and post lesson reflections.

b. How do the assessment results of this lesson inform your future instructional decisions?

Based on what I hear as I circulate amongst the groups during each paired turn and talk moment as well as their comments during the subsequent reporting back to the class moments, I will be prepared to adjust my lesson plan on the spot. If needed, I will make adjustments and/or create enhancements for future lessons within the larger UBD unit.

c. What did you learn about yourself as a teacher by planning and implementing this lesson?

I haven't implemented this lesson yet, but I will during my UBD Unit (e.g., "The phases of the Moon"). Once I have the opportunity to do so, I will definitely include pre, during, and post lesson reflection. As far as what I learned about myself as a teacher during the planning stage, I would have to identify the following realizations:

- 1. Multidisciplinary learning/teaching is important to me (e.g., this lesson incorporates English Language Arts, Science, Social Studies, and Social-emotional Learning).
- 2. Incorporating social justice elements in my lessons is extremely important to me. I think we can learn a great deal from the "Big Movers and Shakers" throughout history. Although the children's book <u>Starry Messenger: Galileo Galilei</u> by Peter Sís deals with a white man of European descent, I think his story and his courage are a model for all.
- 3. Using children's literature offers a non-threatening segue into other content areas, such as math or science, which some students might find intimidating. According to the Lunar and Planetary Institute, where I located the five "World Tales of the Moon" for the previous lesson, it's important to tell stories in science education because:

"Stories are a great catalyst for sparking children's interest and imagination in science exploration. Stories don't offer a scientific explanation, but they have an amazing power to captivate children and inspire them to wonder. Once we have caught their interest and invited them to wonder, we can start talking science. A story is a "hook" on which we can hang a lesson. We can link a story to many other elements of the curriculum, from music making to creative writing, reinforcing children's learning by using different styles of teaching. Folktales, myths and legends speak to us from the traditions of many nations, honoring the varied cultures that enrich our life and our learning. So please: share the stories, enjoy them together."