



American Stories
The Diamond Lens
by Fitz-James O'Brien

Lesson Plan
by Jill Robbins, Ph.D.

Introduction

This lesson plan is to accompany the American Stories series episode, *The Diamond Lens* by Fitz-James O'Brien.

A transcript of the story is included at the end of this lesson to print so students can read as they listen. Teachers who cannot play the audio from the website can read the story aloud or have students read it.

This lesson plan is based on the CALLA Approach. See the end of the lesson for more information and resources on teaching with the CALLA approach. The following slide shows the five parts of this lesson plan.

Lesson Elements

Prepare

Present

Practice

Self-Evaluate

Expand

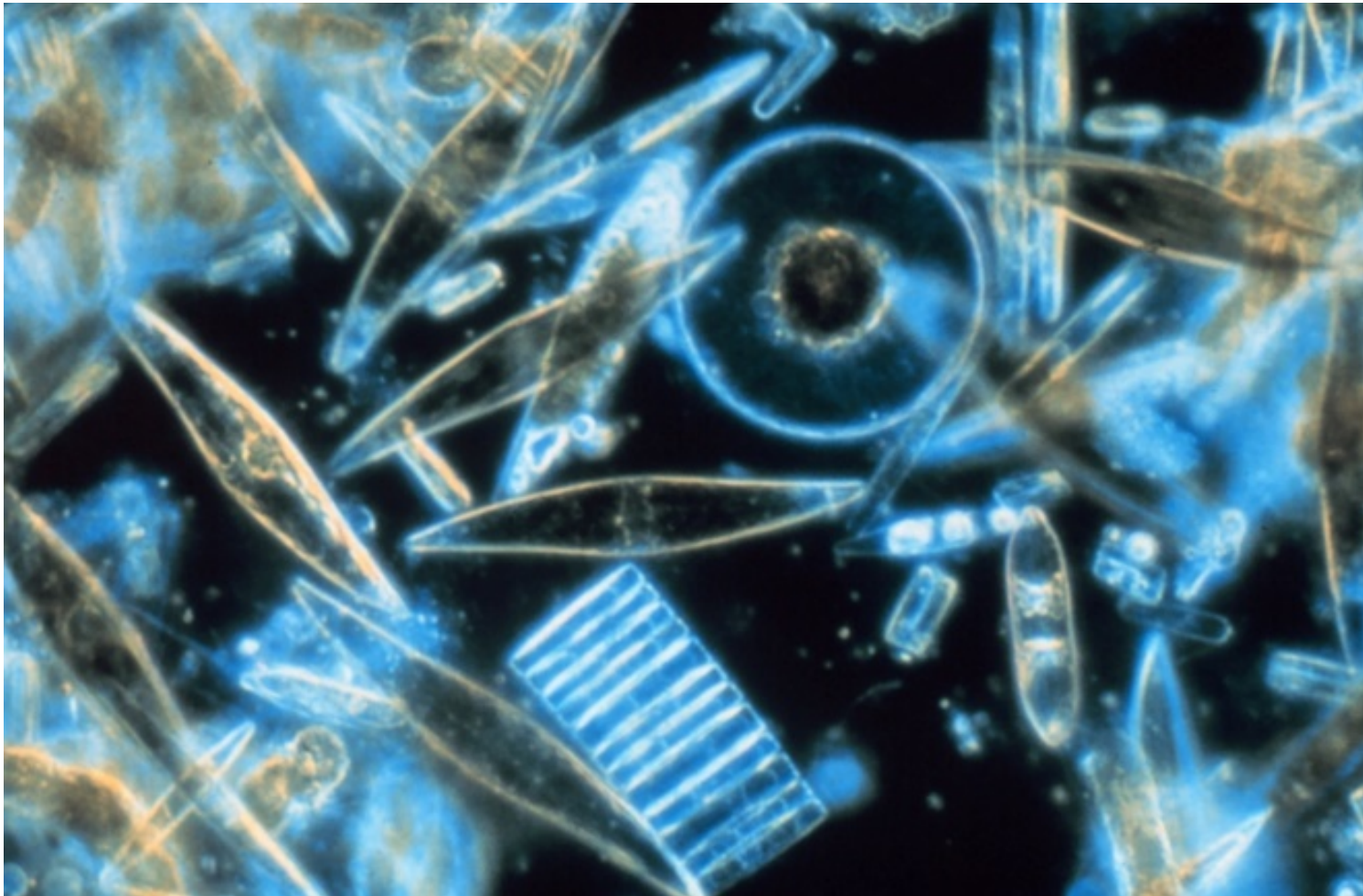
Prepare

Introduce the story. “Today we will read *The Diamond Lens* by Fitz-James O'Brien. It is a story about a man who loves microscopes. Have you ever looked in a microscope? What can you see when you look in one?

Listen to students' answers. Depending on the experiences of your students, some may not have taken a science class or learned about microscopes. You can show a picture of what is seen through a microscope such as the image on the following slide.

Teach the vocabulary for the story shown on the slide after the next one.

Seawater under a microscope



Vocabulary

microscope – *n.* a device used to make very small things look larger so they can be studied

lens - *n.* a clear curved piece of glass or plastic that is used to make things look clearer, smaller, or bigger

magnify - *v.* to make (something) appear larger

ignorant - *adj.* lacking knowledge or information

enormous - *adj.* very great in size or amount

Present

Introduce the task to students: “As we read the story today, we will practice the strategy ***predict*** to help us understand the story. I’m going to begin reading and predict or guess what will happen next in the story. I’ll show you how to do this.”

Play or read aloud to “I decided to study medicine in New York.”

Model the strategy: “The first part of the story describes the main character. We learn that he is very interested in looking at things through a microscope. He says he is going to study medicine. I am going to predict what I think will happen next. I think that he will discover some important medical facts from looking in a microscope.”

Make a chart like the one on the next slide. Tell the students that the story gives us hints about what will happen. To stay engaged with the story (you may say “interested” or “involved” if you like) we can predict what will happen, based on the facts of the story.

Tell students, “For example, in the first paragraph, we read, “clouds that surrounded my daily life rolled away. I saw a universe of tiny living creatures in a drop of water. Day after day, night after night, I studied life under my microscope.” We can predict from this that the main character will try to continue using a microscope. We can guess that it makes him happier than anything else from the part about the clouds rolling away.”

Predict Events

<u>What the story tells me</u>	<u>What I predict will happen</u>
Day after day...I studied life	He will keep using a microscope
I decided to spend my life studying the microscope.	This confirms our first guess. I predict he will study science.
I decided to study medicine in New York.	I predict he will do well as a medical student

Practice

Prepare students for the next part, “Now it’s your turn. Let’s listen to some more of the story. As we listen, think about what will happen next in the story. Use the facts you learn by reading or listening. Take out a piece of paper. Write a chart listing what you predict.”

Play or read aloud to “Also, I had spent a lot of money on my experiments.”

Have students sit with a classmate and share their notes and predictions. Tell them to share with their classmate what they think will happen next. Point out that it doesn’t matter whether their prediction actually happens in the story. What’s important is thinking about what might happen. It helps us to focus as we read.

Give students time to discuss their predictions.

Ask several students to share and write predictions on the board or screen as on the following slide.

Predict Events

<u>What the story tells me</u>	<u>What I predict will happen</u>
...my family would never know I wasn't attending any classes	I predict his family will find out he's not going to classes
I also had become more and more unhappy.	It will be difficult for him to find happiness
I imagined there were still secrets in Nature that the limited power of my equipment prevented me from knowing.	He is not going to be satisfied no matter what he sees

Ask students to listen again. “As we read the rest of this part of story, think about what will happen next. We’ll have to wait until the next class to read the second half of the story. So be sure to write your predictions carefully so you remember them in that class.”

Play or read aloud to the end of the story.

Ask students to write their predictions and share them with their classmate. Continue to write on a chart as shown on the next slide.

Predict Events

<u>What the story tells me</u>	<u>What I predict will happen</u>
Find a diamond of one hundred and forty carats	He will try to find the diamond
You won't get my treasure!	Simon has a large diamond
I believed that I knew Simon's secret.	He is going to take Simon's diamond

Self-Evaluate

Ask students to stay with their partner and ask each other, “What do you think about the main character of this story? What do you understand about his personality?”

Give students time to talk about the main character. Explain that in order to predict what the main character will do, they have needed to understand what the writer is telling us about his personality.

Ask, “Now I’d like to ask – what do you think about using this strategy, ***predict***, when you read? Did it help you understand the main character? Write a sentence or two on your paper to turn in about how *predicting* helped you today.”

Expand

Ask students, “Are there other times when you can *predict* based on what you know?”

Listen to students’ responses.

Continue, “This strategy is helpful in both reading and listening. *Predicting* helps you focus on information you get from the story. Predicting can help in other school subjects, too. In mathematics we call it estimating. In science we call it making an hypothesis. Try using this strategy tonight when you do your homework, or in your next class. Let me know how it goes!”

About the CALLA Approach

The Cognitive Academic Language Learning Approach (CALLA) is an instructional model for second and foreign language learners based on cognitive theory and research.





CALLA integrates instruction in priority topics from the content curriculum, development of the language skills needed for learning in school, and explicit instruction in using learning strategies for academic tasks.

The goals of CALLA are for students to learn essential academic content and language and to become independent and self-regulated learners through their increasing command over a variety of strategies for learning in school. CALLA can be used in ESL, EFL, bilingual, foreign language, and general education classrooms.







CALLA was developed by Anna Uhl Chamot and J. Michael O'Malley, and is being implemented in approximately 30 school districts in the United States as well as in several other countries.

See a list of language learning strategies below.







Metacognitive Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
METACOGNITIVE STRATEGIES		
Plan / Organize	 Planner	Before beginning a task: <ul style="list-style-type: none">–Set goals.–Plan the task or content sequence.–Plan how to accomplish the task (choose strategies).–Preview a text.
Monitor / Identify Problems	 Check	While working on a task: <ul style="list-style-type: none">–Check your progress on the task.–Check your comprehension as you use the language. Do you understand? If not, what is the problem?–Check your production as you use the language. Are you making sense? If not, what is the problem?
Evaluate	 I did it!	After completing a task: <ul style="list-style-type: none">–Assess how well you have accomplished the learning task.–Assess how well you have used learning strategies.–Decide how effective the strategies were.–Identify changes you will make the next time you have a similar task to do.
Manage Your Own Learning	 Pace Yourself	<ul style="list-style-type: none">–Determine how you learn best.–Arrange conditions that help you learn.–Seek opportunities for practice.–Focus your attention on the task.

Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
TASK-BASED STRATEGIES		
<div></div> <p>USE WHAT YOU KNOW</p>		
Use Background Knowledge	 <p>I know.</p>	<ul style="list-style-type: none">-Think about and use what you already know to help you do the task.- Make associations between new information and your prior knowledge.-Use new information to clarify or modify your prior knowledge.
Make Inferences	 <p>Use Clues</p>	<ul style="list-style-type: none">-Use context and what you know to figure out meaning.-Read and listen between the lines.-Go beyond the text to understand its meaning.
Make Predictions	 <p>Crystal Ball</p>	<ul style="list-style-type: none">-Anticipate information to come.-Make logical guesses about what will happen in a written or oral text.-Make an estimate (math).-Make a hypothesis (science).
Personalize	 <p>Me</p>	<ul style="list-style-type: none">-Relate new concepts to your own life, to your experiences, knowledge, beliefs and feelings.


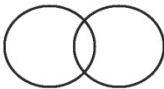


Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
TASK-BASED STRATEGIES		
Transfer / Use Cognates	 Coffee/Café	-Apply your linguistic knowledge of other languages (including your native language) to the target language. -Recognize cognates.
Substitute / Paraphrase	 Make it work	-Use a synonym or descriptive phrase for unknown words or expressions.
<div></div> USE YOUR SENSES		
Use Images	 See it in your mind	-Use or create an actual or mental image to understand and/or represent information. -Use or draw a picture or diagram.
Use Sounds	 Sound Out	-Say or read aloud a word, sentence, or paragraph to help your understanding. -Sound out/vocalize. - Use your “mental tape recorder” to remember sounds, words, phrases, and/or conversations.






Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
TASK-BASED STRATEGIES		
Use Your Kinesthetic Sense		--Act out a role, for example, in Readers' Theater, or imagine yourself in different roles in the target language. --Use real objects to help you remember words, sentences, or content information.
<div></div> USE YOUR ORGANIZATIONAL SKILLS		
Find/Apply Patterns	 <p>abacus</p>	-Apply a rule. -Make a rule. -Recognize and apply letter/sound, grammar, discourse, or register rules. -Identify patterns in literature (genre). -Identify patterns in math, science, and social studies.
Classify/Sequence	 <p>Life cycle</p>	-Categorize words or ideas according to attributes. -Classify living things; identify natural cycles. -Identify order and sequences in math, science, and social studies. -Sequence events in history.

Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
TASK-BASED STRATEGIES		
Take Notes	 PDA	<ul style="list-style-type: none">-Write down important words and ideas while listening or reading.-List ideas or words to include in speaking or writing..
Use Graphic Organizers	 A Venn diagram	<ul style="list-style-type: none">-Use or create visual representations (such as Venn diagrams, time lines, webs, and charts) of important relationships between concepts.
Summarize	 Main Idea	<ul style="list-style-type: none">-Create a mental, oral, or written summary of information.
Use Selective Attention	 Focus	<ul style="list-style-type: none">-Focus on specific information, structures, key words, phrases, or ideas.

Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
TASK-BASED STRATEGIES		
<div></div> <p>USE A VARIETY OF RESOURCES</p>		
Access Information Sources	 <p>Look it up!</p>	<ul style="list-style-type: none">-Use the dictionary, the internet, and other reference materials.-Seek out and use sources of information.-Follow a model-Ask questions
Cooperate	 <p>Together</p>	<ul style="list-style-type: none">-Work with others to complete tasks, build confidence, and give and receive feedback.
Talk Yourself Through It (Self-Talk)	 <p>I can do it!</p>	<ul style="list-style-type: none">- Use your inner resources. Reduce your anxiety by reminding yourself of your progress, the resources you have available, and your goals.