

# Learning English

## **American Stories**

### ***Doctor Heidegger's Experiment*** ***by Nathaniel Hawthorne***

Lesson Plan  
*by Jill Robbins, Ph.D.*

# Introduction

This lesson plan is to accompany the American Stories series episode, *Doctor Heidegger's Experiment*, by Nathaniel Hawthorne.

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 *Doctor Heidegger’s Experiment*, a story about people who want to be young again. How do you feel about being young? Do you like it, or do you want to be older?”

Listen to students’ comments about aging. Many young people would prefer to be older. They may not realize that older people wish to be younger.

Teach the vocabulary for the story.

# Vocabulary

**vase** - *n.* a container that is used for holding flowers or for decoration

**Fountain of Youth** - *n.* in stories and legends: a fountain with magic water or source of the kind of energy or health that young people usually have

**wondrous** - *adj.* causing wonder or amazement : very beautiful or impressive

**magic** - *adj.* having the power to make impossible things happen; having supernatural power

**nationalism** - *n.* a feeling that people have of being loyal to and proud of their country often with the belief that it is better and more important than other countries

**temporary** - *adj.* continuing for a limited amount of time; not permanent

# Present

Introduce the task to students: “As we read the story today, we will practice the strategy *predicting* to guess what will happen next in the story. When we think about what the characters in a story will do, we are using our imagination to help us understand the story. I’ll show you how to do this.”

Play or read aloud to “And they had once been on the point of killing each other over her.”

Tell students, “Hawthorne tells us about the guests. He says that the three men all loved the woman. I am thinking, maybe they will get into a fight about her at this party.”

Model the strategy: “When I imagine what might happen next, I am *predicting*. It makes me want to read more of the story and find out what happens. It doesn’t matter, though, if what I predict really happens. Predicting helps me focus on the story as I read.”

Play or read aloud to ‘But his four guests did not expect anything very interesting.’

Check prediction: “Well, they didn’t get into a fight yet. So I’ll make another prediction now. Here, we find out that Doctor Heidegger is like a magician. His wife died drinking some medicine he made for her. He wants to do an experiment with his friends. I think this might be dangerous.”

# Practice

Ask, “Do you think the doctor’s experiment will help or hurt his friends?”

Listen to students’ ideas about the experiment.

Summarize: “Good. You are making predictions about Doctor Heidegger’s experiment. Let’s read some more and check on our predictions.”

Play or read aloud to ‘You have been a long time growing old. Surely you could wait half an hour to grow young!’



Instruct students to sit with another student and talk about the predictions they can make. “With your partner, think, what will happen now? Will the magic water change the guests? How?”

Give students time to discuss their predictions. Ask them to write down at least two predictions on a notebook or paper.

Let’s read some more of the story. Keep thinking about your prediction.

Play or read aloud to ‘They gathered around the widow, each grabbing for her.’

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Remind students of your prediction: “Do you remember what I said earlier? I predicted that the men would fight over the woman! My prediction was right. But my other prediction was not right. That’s ok. When I was reading, I paid attention because I wanted to see if my prediction was right. Talk with your partner now about your predictions for this part of the story.”

**Give students time to discuss their predictions.**

“Let’s read the rest of the story. Pay attention and see if what you predicted actually happens.”

**Play to the end of the story.**

# Self-Evaluate

Ask students to stay with their partner and talk about Doctor Heidegger's comments at the end of the story: "And the Water of Youth lies wasted on the ground. But even if it flowed in a river at my door, I still would not drink it. This is the lesson you have taught me!".

Give students time to talk about the meaning of this comment. Possible interpretations might be: the doctor doesn't want to repeat the mistakes of his past; he thinks the guests are being foolish; he knows the effect is only temporary.

Ask, "Now I'd like to ask – what do you think about using this strategy, *predicting*, when you read? Did it help you follow the story? 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*?”

Listen to students’ responses.

Continue, “This strategy is helpful in both reading and listening. Predicting prepares your mind to understand what you read or hear. And remember, it doesn’t matter if what you predict happens. Just predicting is enough to get your brain more active as you learn. Try using this strategy tonight when you do your homework, or in your next class. Let me know how it goes!”

That very unusual man, old Doctor Heidegger, once invited four friends to meet him in his office. There were three white-bearded gentlemen, Mister Medbourne, Colonel Killigrew, and Mister Gascoigne. And, there was a thin old lady whose husband had died, so she was called the Widow Wycherly.

They were all sad old creatures who had been unfortunate in life. As a young man, Mister Medbourne had lost all his money in a badly planned business deal. Colonel Killigrew had wasted his best years and health enjoying the pleasures of women and drink. Mister Gascoigne was a ruined politician with an evil past.

As for the Widow Wycherly, tradition tells us that she was once a great beauty. But shocking stories about her past had led the people of the town to reject her. So, she lived very much alone.

It is worth stating that each of these three men were early lovers of the Widow Wycherly. And they had once been on the point of killing each other over her.

"My dear old friends," said Doctor Heidegger, "I would like your help in one of my little experiments." He motioned for them to sit down.

Doctor Heidegger's office was a very strange place. The dark room was filled with books, cobwebs, and dust. An old mirror hanging between two bookcases was said to show the ghosts of all the doctor's dead patients.

On another wall hung a painting of the young woman Doctor Heidegger was to have married long ago. But she died the night before their wedding after drinking one of the doctor's medicines. The most mysterious object in the room was a large book covered in black leather. It was said to be a book of magic.

On the summer afternoon of our story, a black table stood in the middle of the room. On it was a beautiful cut-glass **vase**. Four glasses were also on the table.

Doctor Heidegger was known for his unusual experiments. But his four guests did not expect anything very interesting.

The doctor picked up his black leather book of magic. From its pages he removed a dried-up old rose.

"This rose," said the doctor, "was given to me fifty-five years ago by Sylvia Ward, whose painting hangs on this wall. I was to wear it at our wedding. Would you think it possible that this ancient rose could ever bloom again?"

"Nonsense!" said the Widow Wycherly with a toss of her head. "You might as well ask if an old woman's lined face could ever bloom again."

"See!" answered Doctor Heidegger.

He reached for the vase and threw the dried rose into the water it contained. Soon, a change began to appear. The crushed and dried petals moved and slowly turned from brown to red. And there was the rose of half a century looking as fresh as when Sylvia Ward had first given it to her lover.

"That is a very pretty trick," said the doctor's friends. "What is the secret?"

"Did you ever hear of the **Fountain of Youth**?" asked Doctor Heidegger. "The Spanish explorer Ponce De Leon went in search of it centuries ago. But he was not looking in the right place. If I am rightly informed, the famous Fountain of Youth is in southern Florida. A friend of mine has sent me the water you see in the vase."

The doctor filled the four glasses with water from the Fountain of Youth. The liquid produced little bubbles that rose up to the silvery surface. The old guests agreed to drink the water, although they did not believe in its power.

"Before you drink, my friends," the doctor said, "you should draw up a few general rules as guidance before you pass a second time through the dangers of youth. You have had a lifetime of experience to direct you. Think what a shame it would be if the wisdom of your experiences did not act as a guide and teacher."

The doctor's four friends answered him with a laugh. The idea that they would ever repeat the mistakes of their youth was very funny.

"Drink, then," said the doctor. "I am happy that I have so well chosen the subjects of my experiment."

They raised the glasses to their lips. If the liquid really was magical, it could not have been given to four human beings who needed it more. They seemed as though they had never known youth or pleasure. They looked like they had always been the weak, unhappy creatures who were bent over the doctor's table.

They drank the water.

There was an almost immediate improvement among the guests. A cheerful glow like sunshine brightened their faces. They looked at one another imagining that some magic power had really started to smooth the lines on their faces.

"Quick! Give us more of this **wondrous** water!" they cried. "We are younger, but we are still too old!"

"Patience!" said Doctor Heidegger who watched the experiment with scientific coolness. "You have been a long time growing old. Surely you could wait half an hour to grow young!"

Again he filled their glasses. The four guests drank the liquid in one swallow. As the liquid passed down their throats it seemed to change their whole systems. Their eyes grew clear and bright. Their hair turned from silver to darker shades.

"My dear widow, you are lovely!" cried Colonel Killigrew, who watched as the signs of age disappeared from her face.

The widow ran to the mirror.

The three men started to behave in such a way that proved the **magic** of the Fountain of Youth's water.

Mister Gascoigne's mind turned to political topics. He talked about **nationalism** and the rights of the people. He also told secrets softly to himself.

All this time Colonel Killigrew had been shouting out happy drinking songs while his eyes turned towards the curvy body of the Widow Wycherly.

Mister Medbourne was adding dollars and cents to pay for a proposed project. It would supply the East Indies with ice by linking a team of whales to the polar icebergs.

As for the Widow Wycherly, she stood in front of the mirror greeting her image as a friend she loved better than anything in the world.

"My dear old doctor," she cried, "please give me another glass!"

The doctor had already filled the glasses again. It was now near sunset and the room was darker than ever. But a moon-like light shined from within the vase. The doctor sat in his

chair watching. As the four guests drank their third glass of water, they were silenced by the expression on the doctor's mysterious face.

The next moment, the exciting rush of young life shot through their blood. They were now at the happy height of youth. The endless cares, sadness, and diseases of age were remembered only as a troubled dream from which they had awoken.

"We are young!" they cried.

The guests were a group of happy youngsters almost crazy with energy. They laughed at the old-fashioned clothing they wore. They shouted happily and jumped around the room.

The Widow Wycherly - if such a young lady could be called a widow - ran to the doctor's chair and asked him to dance.

"Please excuse me," answered the doctor quietly. "My dancing days were over long ago. But these three young men would be happy to have such a lovely partner."

The men began to argue violently about who would dance with her. They gathered around the widow, each grabbing for her.

Yet, by a strange trick owing to the darkness of the room, the tall mirror is said to have reflected the forms of three old, gray men competing for a faded, old woman.

As the three fought for the woman's favor, they reached violently for each other's throats. In their struggle, they turned over the table. The vase broke into a thousand pieces. The Water of Youth flowed in a bright stream across the floor.

The guests stood still. A strange coldness was slowly stealing over them all. They looked at Doctor Heidegger who was holding his treasured rose. The flower was fading and drying up once more.

The guests looked at each other and saw their looks changing back. "Are we grown old again so soon?" they cried.

In truth they had. The Water of Youth had powers that were only **temporary**.

"Yes, friends, you are old again," the doctor said. "And the Water of Youth lies wasted on the ground. But even if it flowed in a river at my door, I still would not drink it. This is the lesson you have taught me!"

But the doctor's four friends had learned no such lesson. They decided at that moment to travel to Florida and drink morning, noon, and night from the Fountain of Youth.

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### Words in This Story

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# 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.

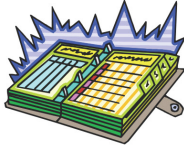



The goals of CALLA are for students to learn essential academic content and language and to become independent and self-regulated learners through their increasing command over a variety of strategies for learning in school. CALLA can be used in ESL, EFL, bilingual, foreign language, and general education 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	
<b>METACOGNITIVE STRATEGIES</b>		
Plan / Organize	 <p>Planner</p>	<p>Before beginning a task:</p> <ul style="list-style-type: none"> <li>-Set goals.</li> <li>-Plan the task or content sequence.</li> <li>-Plan how to accomplish the task (choose strategies).</li> <li>-Preview a text.</li> </ul>
Monitor / Identify Problems	 <p>Check</p>	<p>While working on a task:</p> <ul style="list-style-type: none"> <li>-Check your progress on the task.</li> <li>-Check your comprehension as you use the language. Do you understand? If not, what is the problem?</li> <li>-Check your production as you use the language. Are you making sense? If not, what is the problem?</li> </ul>
Evaluate	 <p>I did it!</p>	<p>After completing a task:</p> <ul style="list-style-type: none"> <li>-Assess how well you have accomplished the learning task.</li> <li>-Assess how well you have used learning strategies.</li> <li>-Decide how effective the strategies were.</li> <li>-Identify changes you will make the next time you have a similar task to do.</li> </ul>
Manage Your Own Learning	 <p>Pace Yourself</p>	<ul style="list-style-type: none"> <li>-Determine how you learn best.</li> <li>-Arrange conditions that help you learn.</li> <li>-Seek opportunities for practice.</li> <li>-Focus your attention on the task.</li> </ul>


# Task-Based Strategies

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


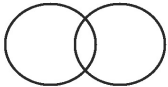


# Task-Based Strategies

CALLA CONTENT AND LANGUAGE LEARNING STRATEGIES		
STRATEGY	DESCRIPTION	
<b>TASK-BASED STRATEGIES</b>		
Transfer / Use Cognates	 Coffee/Café	<ul style="list-style-type: none"> <li>-Apply your linguistic knowledge of other languages (including your native language) to the target language.</li> <li>-Recognize cognates.</li> </ul>
Substitute / Paraphrase	 Make it work	<ul style="list-style-type: none"> <li>-Use a synonym or descriptive phrase for unknown words or expressions.</li> </ul>
  <b>USE YOUR SENSES</b>		
Use Images	 See it in your mind	<ul style="list-style-type: none"> <li>-Use or create an actual or mental image to understand and/or represent information.</li> <li>-Use or draw a picture or diagram.</li> </ul>
Use Sounds	 Sound Out	<ul style="list-style-type: none"> <li>-Say or read aloud a word, sentence, or paragraph to help your understanding.</li> <li>-Sound out/vocalize.</li> <li>- Use your "mental tape recorder" to remember sounds, words, phrases, and/or conversations.</li> </ul>



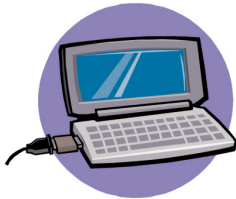


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STRATEGY	DESCRIPTION	
<b>TASK-BASED STRATEGIES</b>		
Use Your Kinesthetic Sense		<ul style="list-style-type: none"> <li>--Act out a role, for example, in Readers' Theater, or imagine yourself in different roles in the target language.</li> <li>-Use real objects to help you remember words, sentences, or content information.</li> </ul>
  <b>USE YOUR ORGANIZATIONAL SKILLS</b>		
Find/Apply Patterns	 abacus	<ul style="list-style-type: none"> <li>-Apply a rule.</li> <li>-Make a rule.</li> <li>-Recognize and apply letter/sound, grammar, discourse, or register rules.</li> <li>-Identify patterns in literature (genre).</li> <li>-Identify patterns in math, science, and social studies.</li> </ul>
Classify/Sequence	 Life cycle	<ul style="list-style-type: none"> <li>-Categorize words or ideas according to attributes.</li> <li>-Classify living things; identify natural cycles.</li> <li>-Identify order and sequences in math, science, and social studies.</li> <li>-Sequence events in history.</li> </ul>

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

# Task-Based Strategies

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