

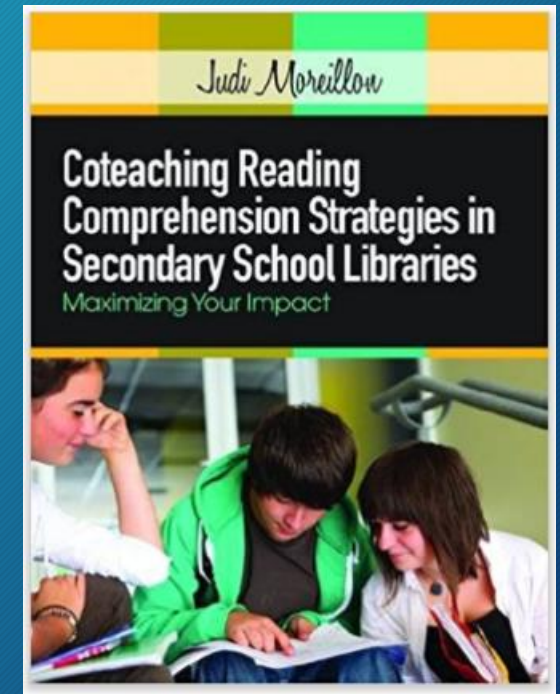
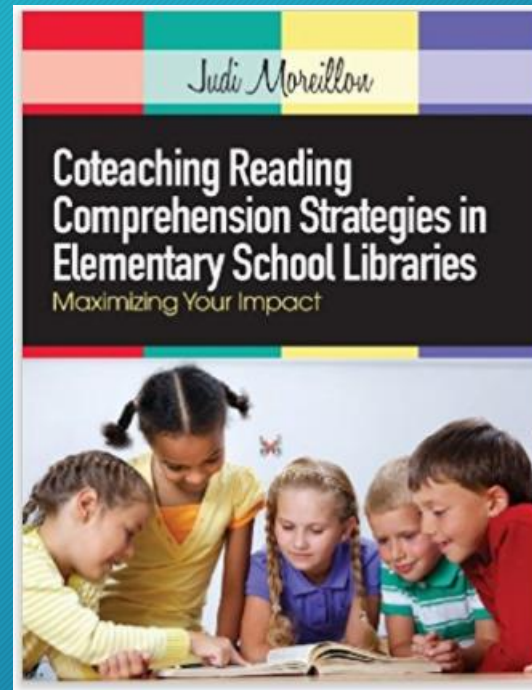
Technology
+ Reading Comprehension Strategies
= Literacy Instruction Excellence!

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University of Alabama

Background

- Based on summer 2017 PD
- Reading comprehension instructional strategies
- Differentiated by instructional level
- Used Judi Moreillon's books as class textbook



Goals of this session

- Why reading comprehension strategies?
- Crash course in literacy
- 3 specific strategies:
 - Activating/Building Background Knowledge
 - Using Sensory Images
 - Making Predictions and Inferences
- For each strategy:
 - Application
 - Technology support (Use your own device)

Why reading comprehension strategies?

- The Every Student Succeeds Act of 2015, section 2224
 - The “Literacy Instruction Team”
 - This bolsters our collaboration!
- Literacy.... or literacy?
 - Information literacy
 - Learning to read
- It’s a lifelong area of improvement



Source: North Carolina Council on Developmental Disabilities

Crash course in literacy



Source: ThomasLife/flickr

- Learning to read requires explicit instruction.
- The earliest skills for learning to read involve a predictable, step-by-step process.
 - 4 steps
- Louisa Moats (2010) “Speech to Print: Language Essentials for Teachers”

Stage 1: The Prealphabetic Stage

- Children do not understand that sounds are represented by letters.
- They do understand that printed letters represent a message or information.
- The alphabetic principle



Source: Michael, bluekdesign/flickr



Source: YMCA of South Hampton Roads/flickr

Stage 2: The Early Alphabetic Stage



Source: Patti Jo Rak/flickr

- Phonemes: the individual, discrete speech sounds that make up words.
- “Cat” = /k/ + /ae/ + /t/
- Phonemic awareness: the realization that words are made up of segments of speech that are represented by letters.
- Phonics: actively teaching children these sound-letter correspondences.

Stage 3: The Later Alphabetic Stage

- Greater level of proficiency
- Examples:
 - Children attempt to write unfamiliar words.
 - Children attempt to sound out unfamiliar words.
- This is decoding.
- What are sight words then?



Juicy literacy controversy...

Bottom-up vs. top-down argument

= decoding vs. whole-word

What do you think?

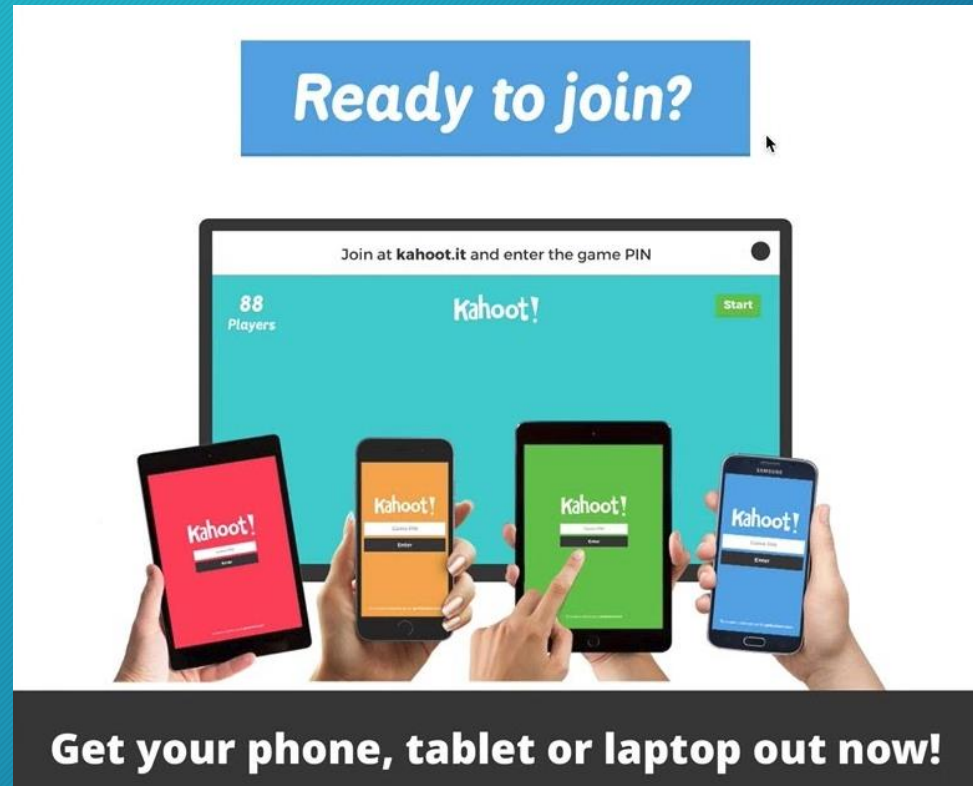


Source: Lyndon Hatherall/flickr

Early Literacy Poll

To take the poll:

- From your device, phone, or laptop
- Go to kahoot.it
- Enter the game PIN



Ready to join?

Join at kahoot.it and enter the game PIN

88 Players

Kahoot!

Start

Kahoot!

Kahoot!

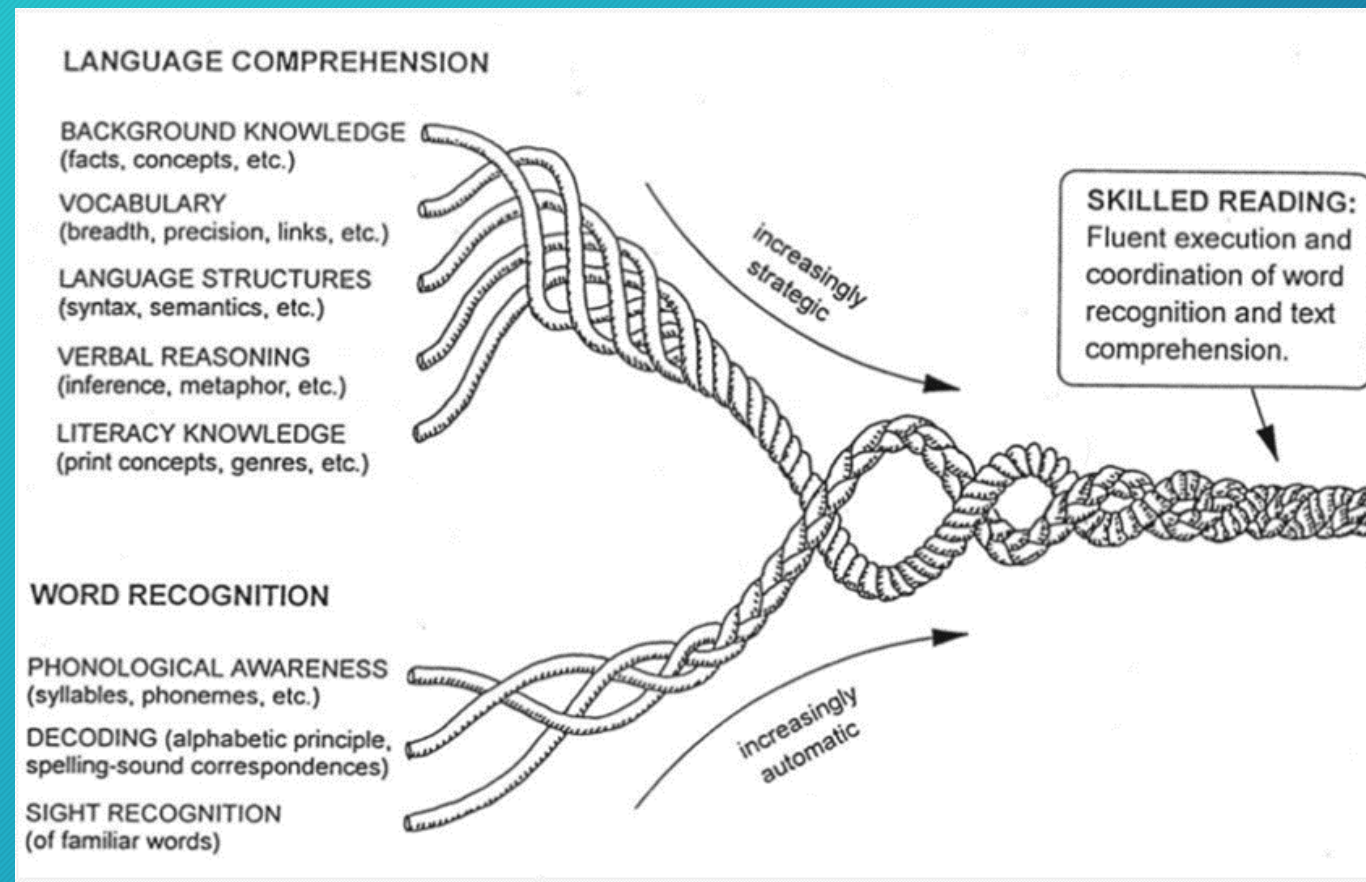
Kahoot!

Kahoot!

Get your phone, tablet or laptop out now!



And the answer is...The Simple View of Reading



Stage 4: The Consolidated Alphabetic Stage



Source: Judy Baxter/flickr

- Children learn the more sophisticated rules of language.
- Reliance on their background knowledge of the earlier literacy skills, in adding these new rules.

When problems happen...



Source: Shivendu Madhava/flickr

- “What if kids don’t get that step?”
- Breakdowns can occur
 - Consider this situation with each step in the literacy acquisition process.
- Breakdowns aren’t limited to elementary school.

Reading Comprehension Basics

- Definition
- Depends on proficient lower-level decoding skills
- The “mental representation”, which is made up of 3 things:
 - Information from the text
 - Information related to the text
 - The inferences generated from the text
- Inferences are the assumptions that the reader makes in connecting information in the text to information that is not currently in the text.

Bridging Inferences

- Connects current information to information that was previously encountered in the text.
- “James crumbled the note into a ball and threw it in the fireplace. He watched as the ashes floated up the chimney.”



Source: a snap happy chappy/flickr

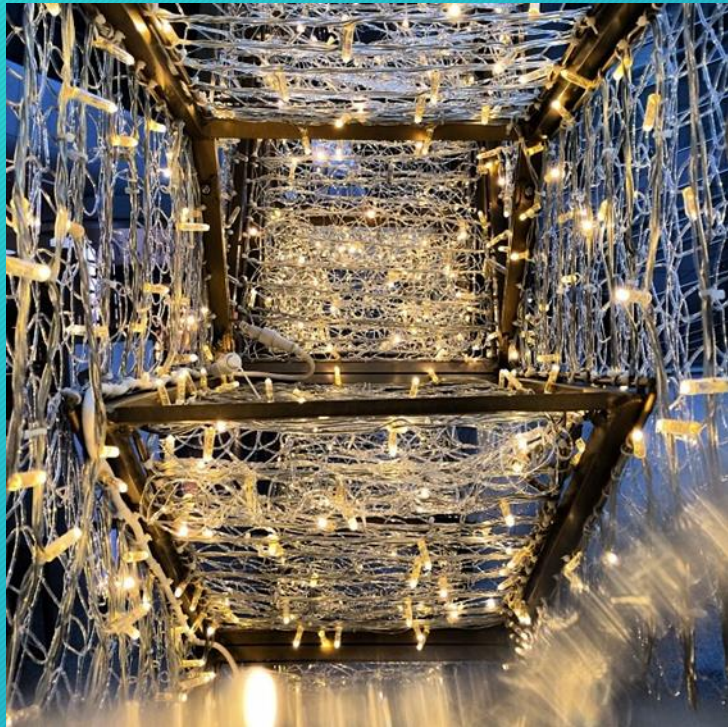
Associative Inferences

- Connects current information to knowledge that is not in the text.
-
- “Mary Ann looked at her calendar: it was December 22nd. She decided to skip her errands near TownSide Mall.”



Source: *lillian-wong/flickr*

The Connectionist Architecture



Source: Gunter Creasey/flickr

- Memories are represented by nodes and links between them.
- They vary in the strength of their connections.
- Multiple memories or concepts can be activated at the same time.
- These processes are automatic and unconscious to the reader.



Source: bert knottenbeld/flickr

The Structure-Building Model



- Proposed by Dr. Morton Gernsbacher in 1990.
- Describes comprehension in terms of 3 processes:
 - Laying a foundation
 - Mapping information onto that foundation
 - Shifting to new structures
- 2 mechanisms for the encoding of memories:
 - Enhancement
 - Suppression

Laying a foundation



Source: Jesus Rodriguez / flickr

- When the one encounters information for the first time.
- An iterative process.
- Prior research supports this assumption.

Mapping and shifting

- Mapping = building information onto the foundation.
- Shifting = Laying another foundation adjacent, and building information on top of there.



Source: Institute of Governmental Studies, UC-Berkeley

Enhancement and suppression

- Enhancement = adding incoming, related information to the foundation structure, and activating this memory node.
- Suppression = reducing activation to information in a node, because it is unrelated to the relevant topic at hand.



Source: ella/flickr

End of crash course



Source: Creative Commons/US Dept. of Education

On to the strategies!

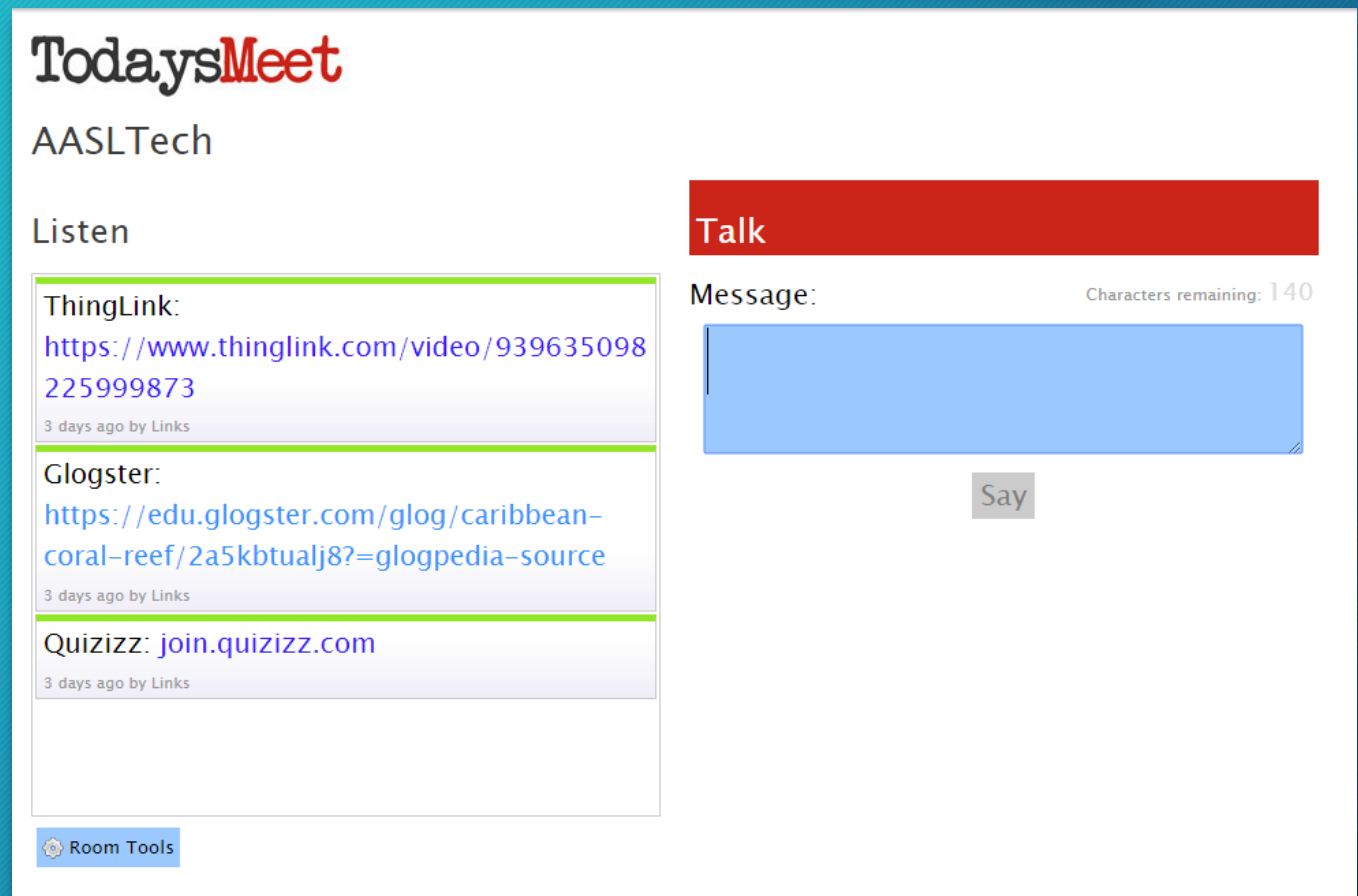
- Strategy #1: Activating or Building Background Knowledge
- Strategy #2: Using Sensory Images
- Strategy #3: Making Predictions and Inferences

Links to Websites

Join the conversation at Today's Meet.

The links to the sites within our presentation can be found at:

<http://today.io/1N0sl>



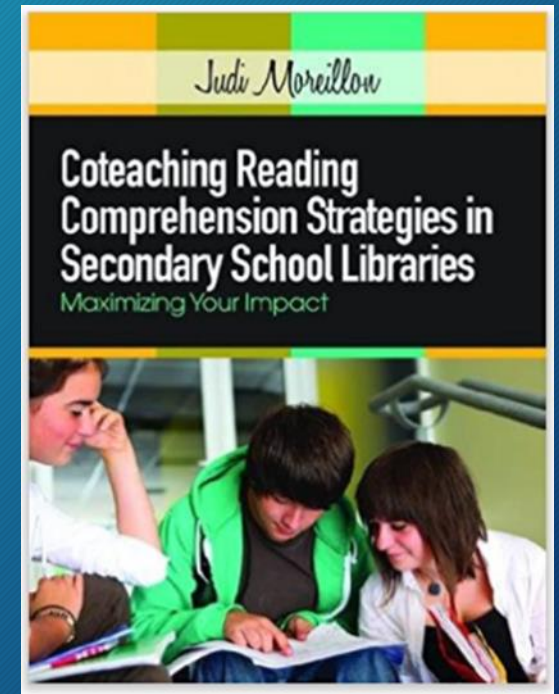
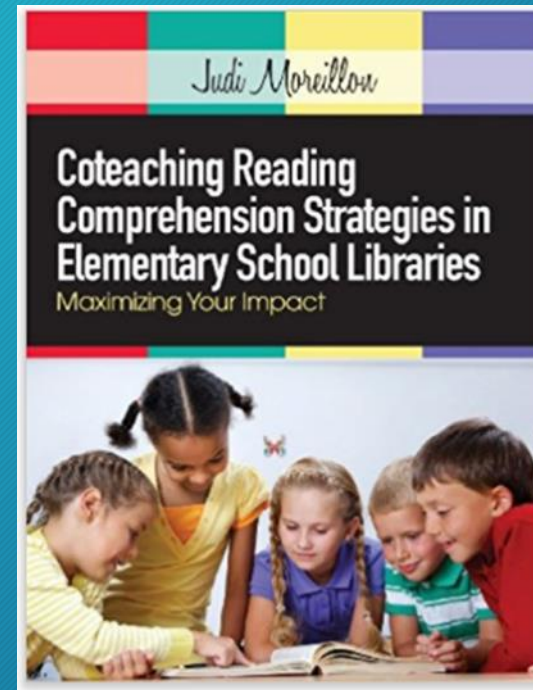
The screenshot shows a Today's Meet chat room interface. At the top left is the logo "Today'sMeet" in red and black. Below it is the room name "AASLTech". There are two tabs: "Listen" (active) and "Talk". The "Listen" tab displays a list of links shared by "Links" 3 days ago:

- ThingLink: <https://www.thinglink.com/video/939635098225999873>
- Glogster: <https://edu.glogster.com/glog/caribbean-coral-reef/2a5kbtualj8?=glogpedia-source>
- Quizizz: join.quizizz.com

At the bottom left of the Listen tab is a "Room Tools" button. The "Talk" tab is currently selected, showing a red header. Below the header is a "Message:" label, a character count "Characters remaining: 140", a large blue text input area, and a "Say" button.

Strategy #1: Activating or Building Background Knowledge

- 3 connection types:
 - Text-to-self
 - Text-to-test
 - Text-to-world



Strategy #1: Activating or Building Background Knowledge

Text-to-Self Connections:

“Have you ever felt like the character(s) in this story? Describe what happened and how you felt.”

“Have you had a similar experience? Compare your experience to that of the character(s)?”

“How does connecting a story or information to your own life experiences help you understand it better?”

(Moreillon, 2013, p. 21)

Strategy #1: Activating or Building Background Knowledge

Text-to-Text Connections:

“Have you ever read another book or seen a movie in which the characters have feelings or experiences similar to the ones in this story? Describe how they are the same.”

“Have you ever read another book or seen a movie in which a story element (setting, plot, conflict, theme, or style) is similar to the one in this story? Describe how they are the same.”

(Moreillon, 2013, p. 23)

Strategy #1: Activating or Building Background Knowledge

Text-to-World Connections:

“What do you think the author’s message or purpose was in writing this story or presenting this information?”

“Did the author suggest a message that connects with bigger ideas about the way things are in the world? What do you already know about these issues?”

“What do you think was the author’s opinion or perspective on the big issues in this text? Do you agree? Why or why not?”

(Moreillon, 2013, p. 23)

Strategy #1: Activating or Building Background Knowledge

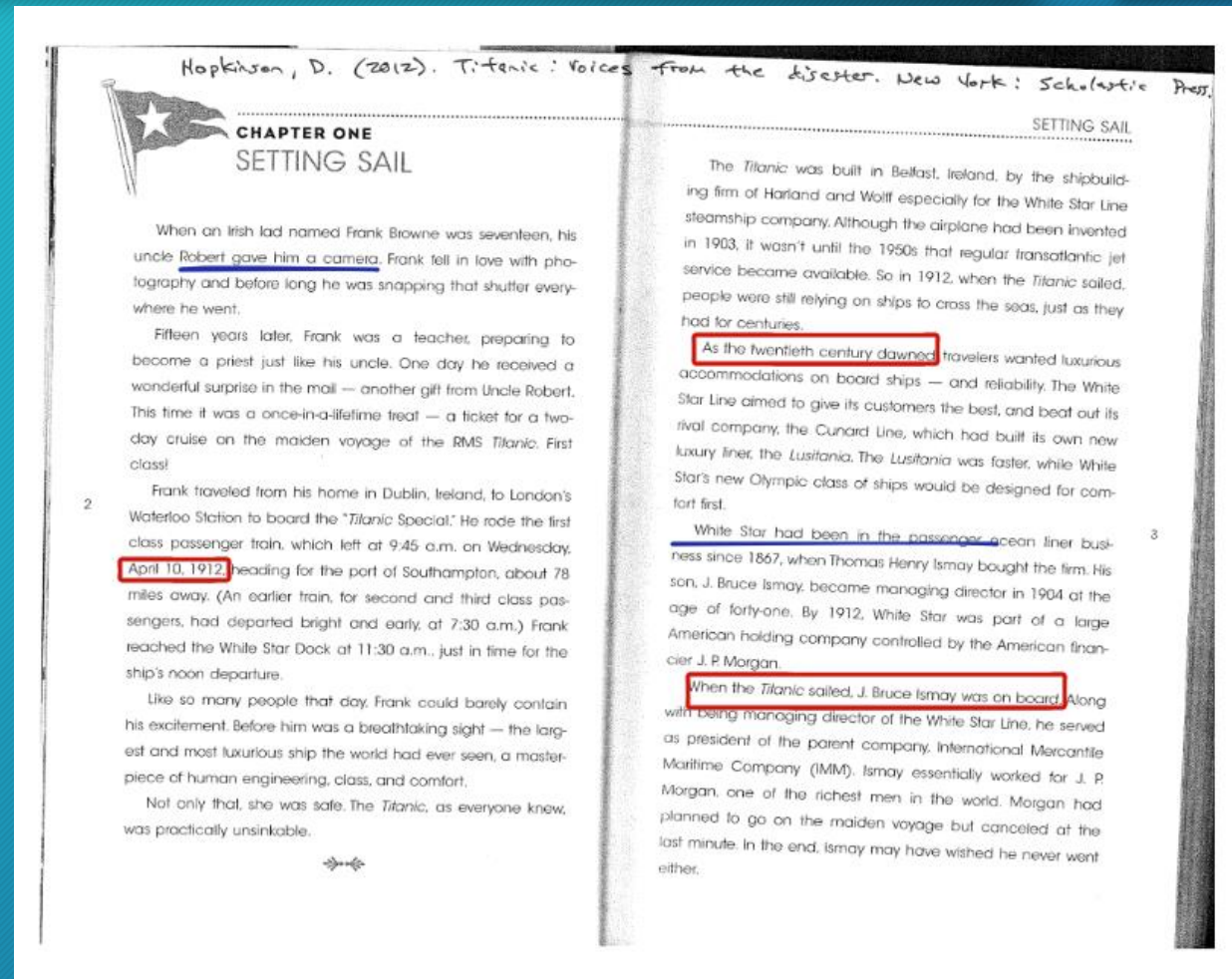
Ziteboard

Pros

- Users do not need to login
- Can save, export, and share boards.

Cons

- Can't use highlighter on free account



Strategy #1: Activating or Building Background Knowledge

Twiddla

Pros

- Don't need to login
- Can share link with anyone
- Easy to use

Cons

- Users could delete others work
- May be difficult with numerous users

<https://www.twiddla.com/g7fybt>

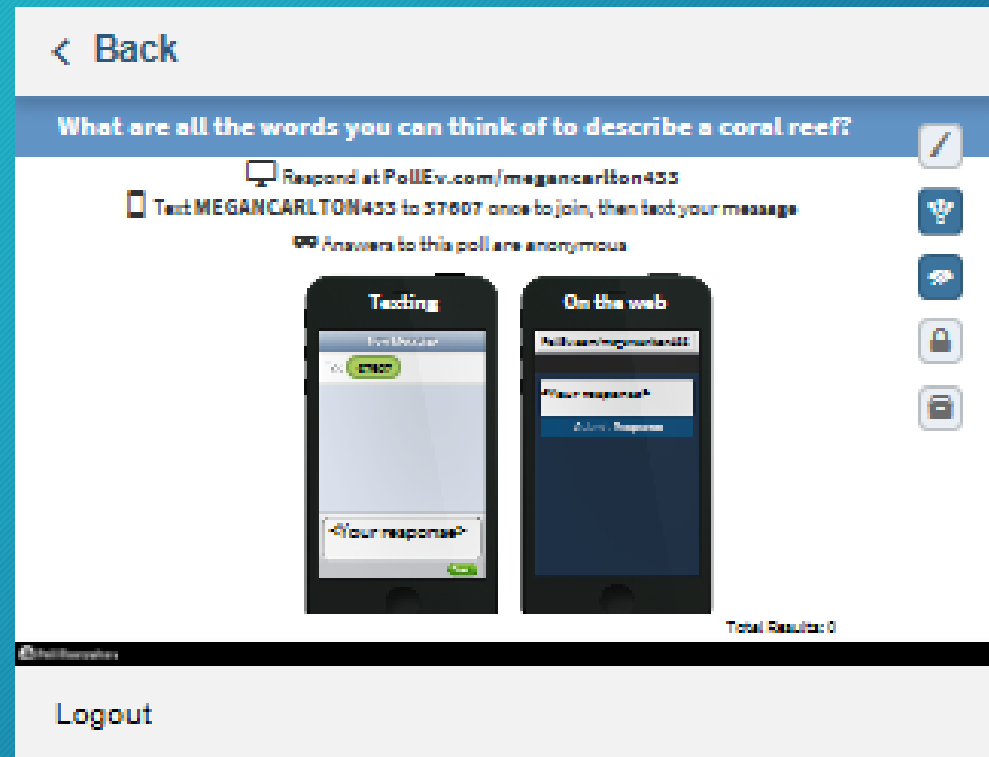
The screenshot displays the Twiddla web application interface. At the top, there is a toolbar with various icons for editing and sharing, including a 'HELLO TWIDDLA' logo, document icons, and a 'Text type' dropdown menu. Below the toolbar, the interface is divided into three columns, each with a black header and a white text area. The first column is labeled 'TEXT TO TEXT' and has a prompt: 'Description of how this text reminds you of something in another text/story.' The second column is labeled 'TEXT TO SELF' and has a prompt: 'Description of how this text reminds you of something in your life.' The third column is labeled 'TEXT TO WORLD' and has a prompt: 'Description of how this text reminds you of something in the world.' At the bottom of the page, there is a small text prompt: 'Create your own at Standard That'.

Strategy #1: Activating or Building Background Knowledge

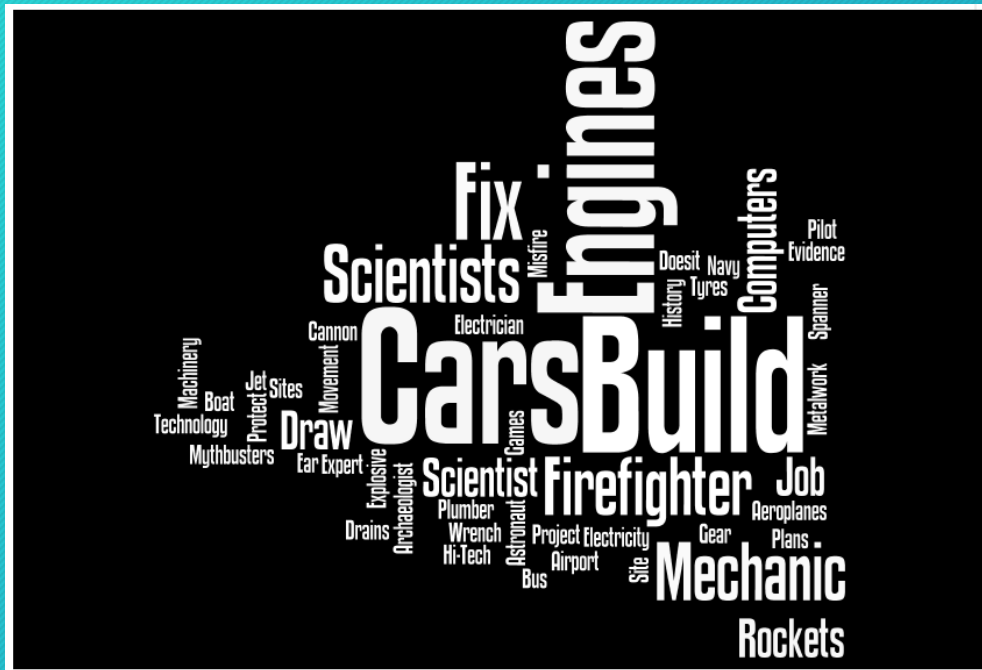
Think-Pair-Wordle-Share

Words to describe a coral reef.

- [PollEv.com/megancarlton433](https://www.pollevo.com/megancarlton433)

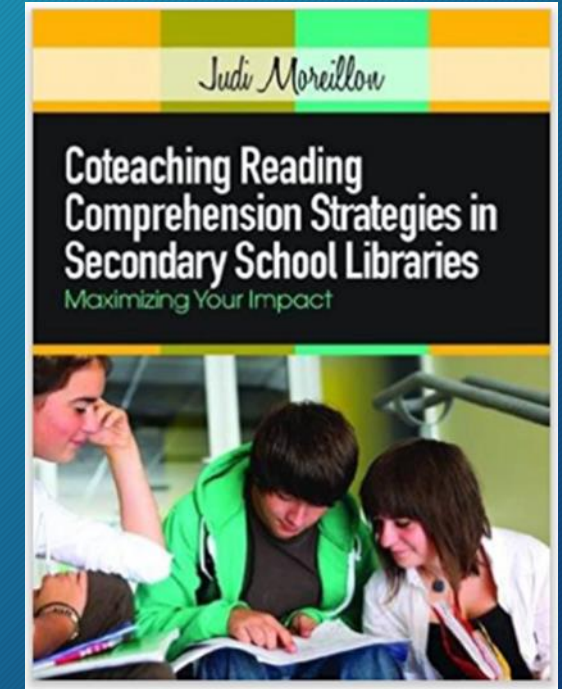
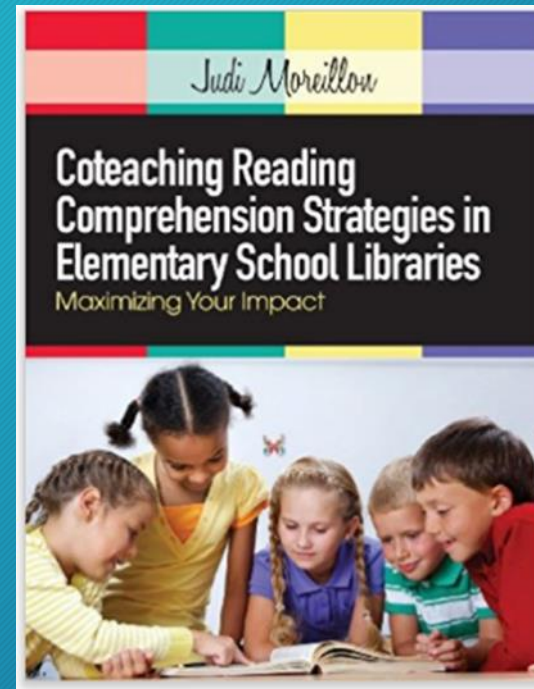


Strategy #1: Activating or Building Background Knowledge



Strategy #2: Using Sensory Images

- Another way to activate background knowledge
- Authors do this through literary devices
- We can do this through technology!



Strategy #2: Using Sensory Images

Glogster

Pros

- Free
- Can be used with all ages
- Students can be creative

Cons

- Need basic technology skills
- Students could become distracted



Strategy #2: Using Sensory Images

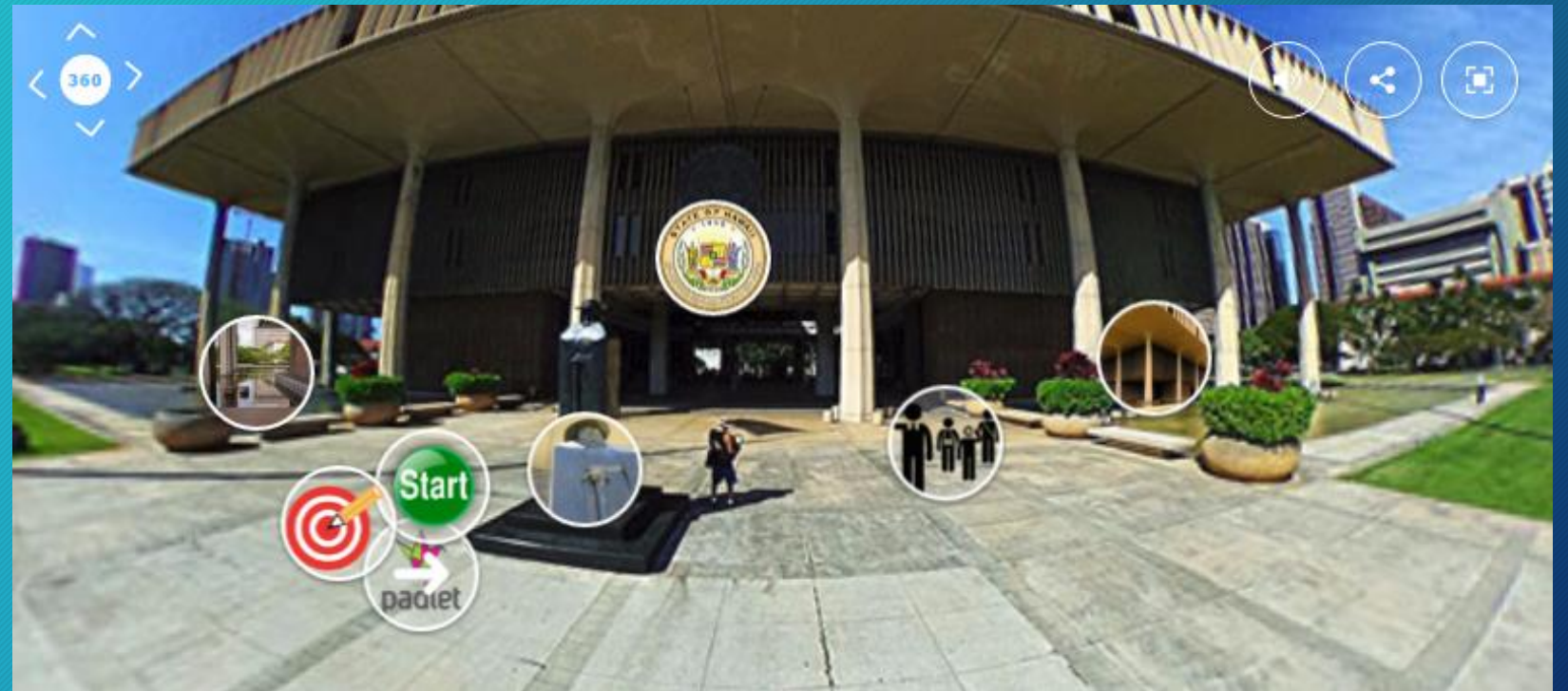
ThingLink

Pros

- Easy to add multimedia

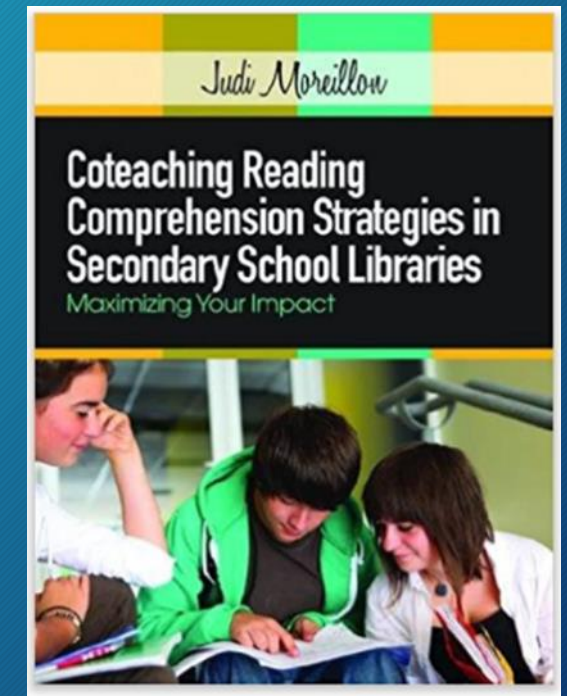
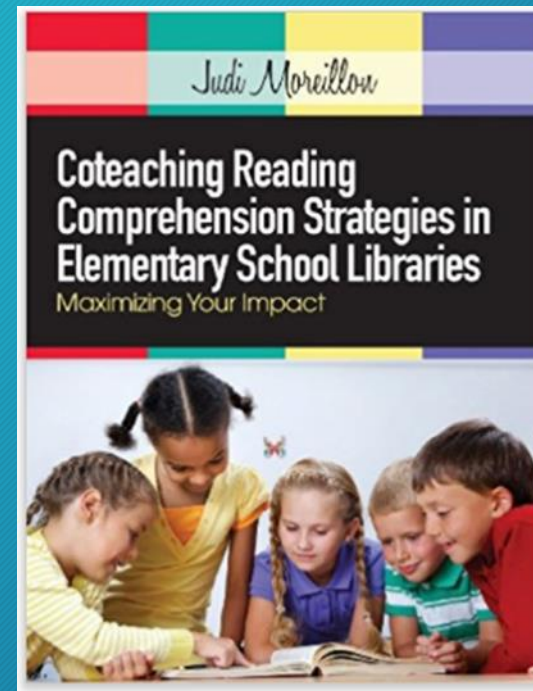
Cons

- Student logins require an email



Strategy #3: Making Predictions and Inferences

- Background information is key!
- Predictions = “on the line”
- Inferences = “between the lines”
 - Bridging inferences
 - Associative inferences



Strategy #3: Making Predictions and Inferences

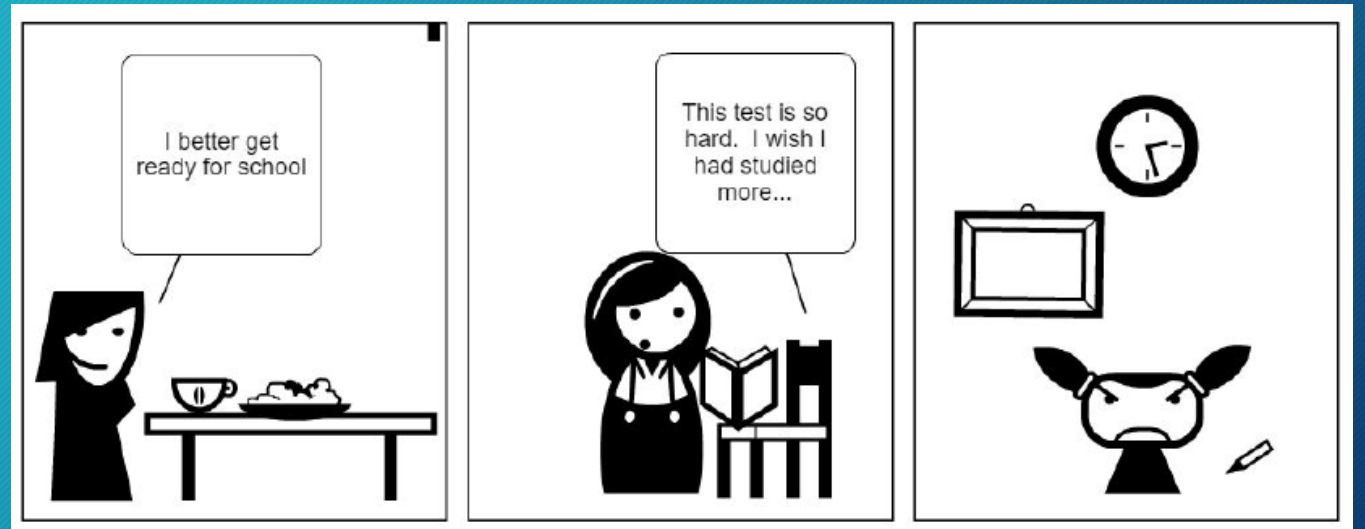
Stripgenerator

Pros

- Don't have to register or log in

Cons

- Has some controversial items
- Can't alter character poses



Strategy #3: Making Predictions and Inferences

Make Beliefs Comix

Pros

- Don't have to register or log in
- Multiple poses for characters
- Easy to figure out controls
- Can save, print, or email

Cons

- Limited number of objects available
- Have to click through all objects to see what is available (no categories)

The screenshot displays the Make Beliefs Comix software interface. At the top, there are input fields for "NAME YOUR COMIX" and "AUTHOR'S NAME", and a "GETTING STARTED" button. The main workspace shows three comic panels. The first panel is titled "SUDDENLY..." and depicts a police officer talking on a mobile phone while a raccoon runs in the rain. The second panel shows a raccoon running through a city street. The third panel, titled "THE NEXT DAY...", shows two police officers talking to each other. A red box highlights the third panel with the text "DIALOGUE PROMPTS" and "PANEL #3".

On the left side, there is a vertical toolbar with icons for "Print/Email", "Move", "Scale", "Bring to Front", "Flip", "Delete", and "Start Over". Below the toolbar is a "MENU HELP" button.

At the bottom, there is a "SELECTION WINDOW" containing a speech bubble icon. To its right is a "CAST OF CHARACTERS" section with various characters and the text "OUR DIVERSE CAST OF CHARACTERS". Below this is a "SCROLL TO VIEW CLICK TO SELECT" instruction. Further right is a "CLICK TO SELECT" instruction for a background image. At the bottom right, there are "BACKGROUND COLORS" and "PANEL CHOICES - SELECT ONE" options.

At the bottom center, there are instructions: "USE ARROWS TO SELECT EMOTIONS, OBJECTS, SCENES, BALLOONS & PANEL PROMPTS. CLICK TO ADD TO PANEL." Below this are buttons for "8 TALK BALLOONS", "8 THOUGHT BALLOONS", and "PANEL PROMPTS THE NEXT DAY...".

Strategy #3: Making Predictions and Inferences

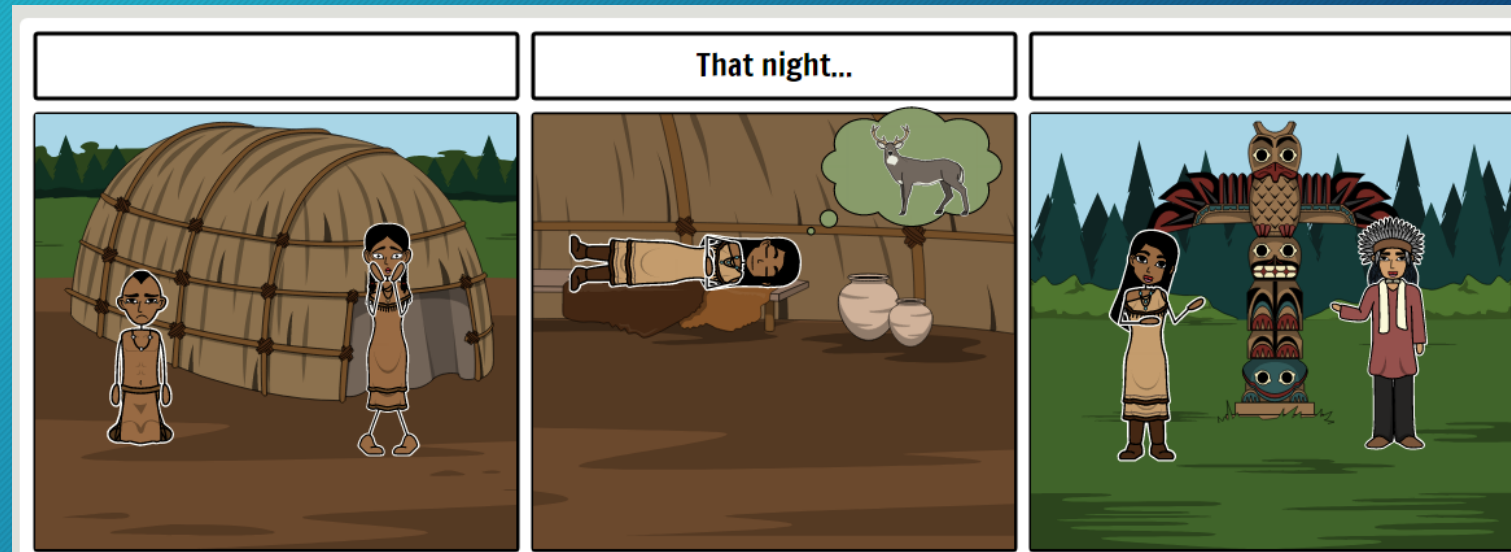
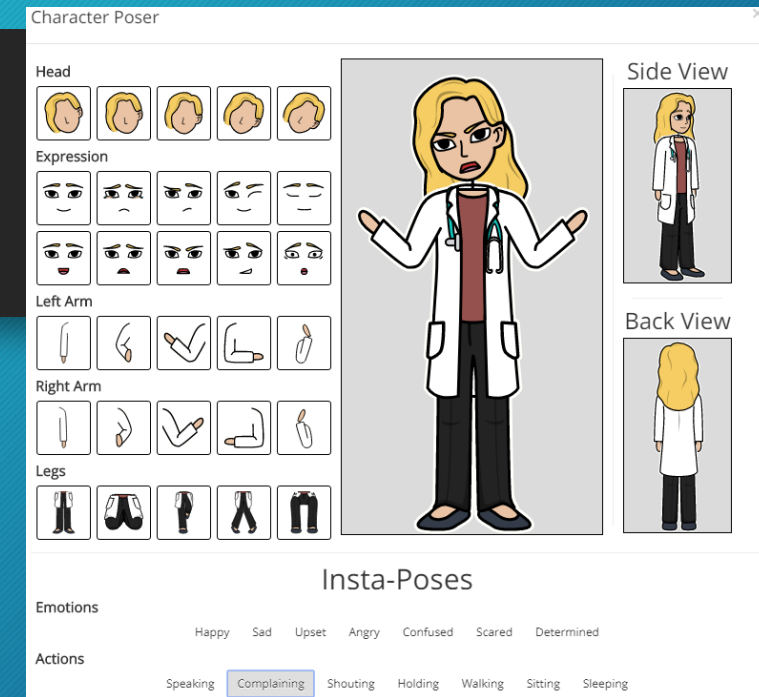
Storyboard That

Pros

- Don't have to register or log in
- Numerous characters and backgrounds that are editable
- Can edit character's pose
- Numerous cell layouts and options

Cons

- Not a lot of objects to choose from
- Can only download watermarked version



Questions?



Walker Library @ Middle Tennessee State Univ.



Rodgers Library @ University of Alabama