

Cognitive Processes

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EDTE 5600

Advanced Studies of Children and Adolescents

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June 8, 2025

Grade: Preschool

Subject: Literacy

Skill: Comprehension of read-aloud text

Educational Resource: Story Emporium ([Work It Out Wombats! . Games . Story Emporium | PBS KIDS](#))

The educational resource that I am going to analyze is *Story Emporium* from Work it Out Wombats, which is a program from PBS Kids. This is a resource that is available for free at www.pbskids.org. The resources on this website are intended for children aged 2-8 years old. Since I teach preschool, I will be focusing on the ages 3-5 years old and the subject area of Literacy, specifically comprehension of read-aloud text. *Story Emporium* is an educational game that allows children to create a story by choosing the theme of the story, the setting, the main character, and something specific that goes with the story. Children simply answer the questions by clicking on three choices for each question (where, who, and what), and then the program creates a story. Then, children listen to the story and see what happens. After the story is over, children have the option to change the where, who, or what of the story to see how it changes the story. This resource can be used at school in small groups or one-on-one, or it could be used at home with a parent/guardian. It is available on the website as well as the PBS Kids app.

The resource *Story Emporium* currently attempts to foster all of the cognitive processes-remember, understand, apply, analyze, evaluate, and create. Students need to remember the parts of a story to understand how their choices to build the story will result in a story. They apply their knowledge of stories by making choices on the theme, setting, main character, and specific prop used. After they have listened to their story, they can analyze and evaluate how the story went based on the choices that they made. Then, they can decide to change a factor in the story to see what it creates. While a student creates the story for the first time, the program asks the child each question about what they would like to choose to create the story.

After the story is read, the program asks the analytical question of “Do you want to change anything in your story?”. This gives the child the opportunity to think about the choices that they made and how a different choice would have had a different outcome in the story. If the child does decide to make changes in the story, the program asks which parts of the story they want to change. These questions are explicitly encouraging the child to think about the choices that they are making to create the story.

The two cognitive views of learning that align with this resource are Schema Theory and Dual-Coding Theory. Schema Theory is the idea that people have a connected network of facts and concepts that provide a structure for making sense of new information. The *Story Emporium* resource builds upon a child’s previous knowledge of print concepts and comprehension of text that is read to them. Children know that stories take place somewhere, have some type of character in them, and that the characters do something in the story. Especially after a child has completed one story and goes to change one of the aspects of it, they can build upon their previous knowledge of how things went in the first story. If they change the prop used, there is likely going to be a different outcome. An example of this is the story “Making Mudpies” in the *Story Emporium* program. The child gets to choose if they add zero cups, one cup, two cups, or three cups of water to their mudpie. This changes the conclusion of their story because if they do not add any water, the mudpie crumbles. If they add too much, then the mudpie is too wet and doesn’t stay together. Students can build upon their previous knowledge of making real mudpies, or think about how their first story went and if they had the right amount of water or not to create a mudpie.

Another cognitive view of learning that relates to this resource is Dual-Coding Theory. This theory is the idea that humans learn best when both visual and auditory information are presented together. In the *Story Emporium* program, children are able to see the pictures and hear the words as they choose the elements of their story. Then they are able to watch and listen to the story being told through a short video. Closed captioning is also available to help

understand print concepts, or an adult could read it to the child if their electronic device does not have sound. It is really important for preschool students to have the opportunity to see visual representations of what they are learning. Learning through just verbal instruction can be difficult for them to understand. With using a video and audio, children are able to see the results of their story clearly. Instead of just hearing that their mudpie fell apart, they are able to watch it happen and better understand the concept that a mudpie needs some water to stay together, otherwise it's just dirt.

One enhancement that I would make to this resource would be to focus more on the cognitive processes of analyzing and evaluating. The *Story Emporium* does some of this by giving a conclusion to the story and asking if the child wants to change anything and do it again, but I think that this could be taken further. Instead, the program could ask further questions to help the child analyze and evaluate the choices that they made to create the story. Some example questions for the mudpie story could be "Why do you think that the mudpie fell apart?" or "Do you think that you need more or less water for your mudpie?". These questions would help children analyze the amount of water they chose and evaluate to see if they need to add more water when they try to make the story again. They would be able to build schemas of this knowledge and make changes the next time that they create the story. Other questions could include "Have you ever made a mudpie before?" or "Would you ever like to make a mudpie, why or why not?". This would help a child relate it to their previous experiences (schemas) or explore the idea of doing it in real-life. This could open up conversations between a child and teacher, a small group of students with a teacher, or a parent/guardian with their child.

Another enhancement that I would make to the *Story Emporium* would be to use the Dual-Coding Theory in an additional way to help children understand, apply, and analyze. After a child has tried a couple of different ways of creating the story, a visual representation using pictures and words of the different conclusions could help a child understand better. An example of this would be after the child has created the mudpie story a few different times using different

amounts of water, they could click on another button to see the four different conclusion possibilities. One picture would have a cumbled pie (zero water), another would have a dirt pie (one cup of water), another would have a good mudpie (two cups of water), and the last would have a goopy mess (three cups of water). You could click on each picture for an audio description of why it happened. I believe that this would help children understand the cause and effect of their choices and then apply it their story to analyze better.

Overall I think that the *Story Emporium* is a great resource for preschool students. It can be used at school or at home to help children comprehend read-aloud texts and create their own stories with different conclusions. The program uses the Schema Theory and the Dual-Coding Theory to build upon previous knowledge of stories, and to teach children using visual and auditory information. The program currently attempts to foster all of the cognitive processes- remember, understand, apply, analyze, evaluate, and create. I propose that two enhancements could be made to the resource to help children deepen their understanding.

References

Moreno, R. (2010). *Educational Psychology* (pp. 192-279). John Wiley & Sons Inc.

WGBH Educational Foundation (n.d.). *Story Emporium*. PBS Kids.

<https://pbskids.org/wombats/games/story-emporium>

Screenshots of Story Emporium







Work It Out Wombats!

English Español





Now we know how to make the perfect mudpie!

With 2 cups of water, it's not too wet and not too dry!



      



Work
It out
Wombats!TM

English Español





Work
It out
Wombats!

English Español



Who?

  

  





Work It out Wombats!

English Español



 Outside the Wombats' House, Zeke and Louisa were making a perfect mudpie.

They said, "It can't be too wet, and it can't be too dry!"



      



Work
It out
Wombats!

English Español



First, choose where your story takes place.





Work
It out
Wombats!

English Español



Making Mudpies!





Work It out Wombats!

English Español



 "1 cup of dirt and 2 cups of water is what I prefer!"

So they added 2 cups of water and they started to stir.



  



Work It out Wombats!

English Español



 "Is it the perfect mudpie?" asked Louisa. Zeke said, "Pick it up, and let's do a test!"

"Wow," they all said. "This mudpie is the best!"

WOW!







Work It out Wombats!

English Español





Then along came Malik, who wanted to join in the fun.

"Can I have a mudpie? I'll trade some stickers for one!"



      

