ADELINE TEO, YUN F. SHAW, JIMMY CHEN, AND DEREK WANG
Taiwan

Using Concept Mapping to Teach Young EFL Learners Reading Skills

Many English as a foreign language (EFL) students fail to be effective readers because they lack knowledge of vocabulary and appropriate reading strategies. We believe that teaching proper reading strategies can help second-language learners overcome their reading problems, especially when the instruction begins in elementary school. Effective reading strategies "provide the means to tackle complex problems in more efficient ways" and allow students to build a "path to comprehension" (McNamara 2009, 34).

One effective strategy is *concept mapping*, which is the use of visual tools to help readers understand material by transferring "the written content into concrete images" (Liu, Chen, and Chang 2010, 442). Through concept-mapping activities, learners connect previously learned and newly learned ideas onto a visual representation, or "map." Research shows that concept maps have positive effects on children's language skills; for example, Liu et al. (2011) describe how concept mapping "prompts learners to reflect to construct meaning based on their observations and knowledge," thereby helping "students develop and apply the knowledge about storytelling" (873). In this article, we describe two reading lessons that use concept mapping to produce beneficial effects for elementary school students.

BACKGROUND

Concept mapping is related to the pedagogical theory of *constructivism*, which asserts that productive learning occurs when students create meaning on their own by connecting previous knowledge and experience with newly formed knowledge and experience. According to Kalhor and Shakibaei (2012), concept mapping (1) helps students understand the framework of the subject being taught; (2) clarifies the relationships and connections among all instructional content; (3) reinforces knowledge retention; and (4) enhances an instructor's teaching objectives. Anderson (1991) stresses the importance of describing reading strategies for students (e.g., visualization and applying background knowledge and experience) and of showing learners how to use them. Therefore, when it comes to teaching EFL reading, it is crucial for a teacher to act as facilitator to help learners construct their own meaning as they apply their current knowledge to new ideas.

TWO CONCEPT-MAPPING LESSONS

The following two lessons are geared toward EFL elementary school children with basic

English language proficiency—at least two years of experience in learning English. We paired up students in advance, and each student remained with the same partner throughout both lessons. Teachers who would like to adapt our lesson plans can make adjustments to suit the level and makeup of their classes.

Concept-mapping Lesson One

The objective of this lesson is to teach students to organize their ideas by drawing their own concept maps based on a story they are already familiar with. To this end, we chose a picture book called *Frozen* (Scollon 2013) because the story is popular and the plot is easy for elementary school students to understand. For this lesson, teachers will need the picture book and a copy of the movie. For teachers and students who do not have access to the picture book and movie, a video book is available at www.youtube.com/watch?v=WlB2IRxAuL0. Teachers will also need copies of the pre-made concept map chart (see the Appendix), a pencil and an eraser for each student, and two pieces of paper and a set of colored pencils for each student pair.

Procedure

1. Show the movie *Frozen*, which is dubbed in the students' first language and contains English subtitles. (An option is to show the original movie in English, with subtitles in the students' first language.) We strongly suggest that teachers allow students to watch the movie a few times and follow with a discussion until students are familiar with the story. Continue the lesson by showing the picture book of *Frozen* to the students and then ask individual students to narrate the story following the actual sequential order of the events.

2. Introduce the idea of the concept map by showing the students the pre-made concept map in the Appendix. Include the four major story-element categories: (1) characters, (2) settings, (3) events, and (4) time order. Explain the meaning of each category so that the students understand what to fill in. Facilitate as the students fill in the significant elements that relate to the story.

3. Have students work in pairs to draw their own concept maps; encourage them to be creative. For example, instead of drawing a traditional concept map as in the example, students can draw a character of their own choice from the story to be used as the topic frame. Many students in our class chose Olaf, the talking snowman in the story, as he is most students' favorite character. For example, one student drew four Olafs with four different poses, and the students recorded their ideas on the Olaf heads and bodies. The heads consisted of four major categories, and the bodies were filled in with the related details. This activity promotes creativity and learner autonomy because students design concept maps according to their own preferences.

4. Have the students rewrite their own versions of the story on their concept maps, adding any characters or events they create themselves. Students employ creativity when they produce a version of a story written by others; they are excited about writing their own versions, as it gives them a sense of ownership. Next, the students color the concept maps and the characters they drew. While the students create their own stories, emphasize that all the events must be recorded in proper time order; ensure that the chronological order of the events arranged by the students reflects logical progression rather than random ordering.

5. This step serves as an assessment stage. Collect and record the ideas from Step 4 and invite students to share their opinions with the class about how they organized the events in the stories. If the students' events do not represent proper time sequence, show them how to connect their ideas by recording the events step-by-step on the concept maps they created on their own in Step 4.

6. Give students time to work in pairs again to discuss the differences between others' work and their own. Point out how each event developed and note whether the events were arranged in proper time order.

7. Ask each pair the following questions and give pairs opportunities to answer:
   - Did you find any differences between others' concept maps and your own?
   - Why did you make your concept map like this [*Event A* first, then *Event B*] instead of like this [*Event B* first, then *Event A*]?
   - Please explain why you wanted to present your story in this way.

In this step, students explain orally to the class, or to other pairs, why certain events happen before or after other events in the stories they created. The purpose is to allow them to explain or justify the time-order arrangement in their stories; this step also allows the teacher to assess students' ability to arrange story events in logical order. For example, students might explain, "In our story, at the beginning we put Johnny in the house instead of at school. The reason is that we wanted him to meet the stray dog on his way to school."

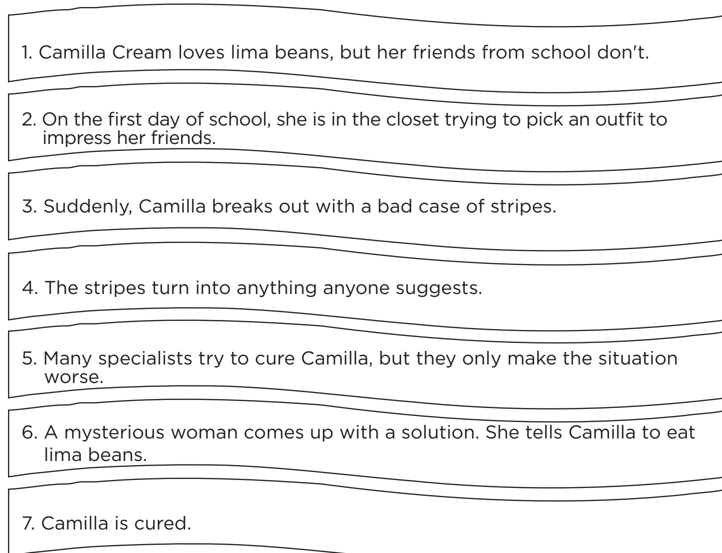

Figure 1. Key events in *A Bad Case of Stripes*

Concept-mapping Lesson Two

The objectives of this lesson are to promote students' ability to use their vocabulary in various contexts and to make predictions and inferences using concept maps.

For our class, we used a picture book titled *A Bad Case of Stripes* (Shannon, Casserly, and Ingemi 2006). This book has been published in many countries. For teachers and students who do not have access to the picture book, the video book is available at www.youtube.com/watch?v=6MeRu0uK2Ms. The story describes Camilla Cream, a girl who agonizes about other people's opinion of her and anxiously tries to please everyone. She goes to great lengths to impress her friends, even to the point of giving up eating lima beans, her favorite food. We chose this book because there are many elements in the story that support making predictions and inferences.

In addition to the storybook, the materials needed for the lesson are a pencil and eraser and several pieces of paper for each student; a pre-made chart showing key events in the story (Figure 1); copies of a concept map for making predictions (Figure 2); and copies of a concept map for making inferences (Figure 3).

Procedure

1. Explain to the students that in this lesson they will learn new vocabulary and reading skills for making predictions and inferences. Key vocabulary terms include *stripes, afraid, disaster, embarrassed, worst,* and *lima beans*. Teach the vocabulary by using concept maps. For example, place the word *afraid* in large print in a circle in the center of the concept map, with lines extending to four squares on the page. Ask students to think of four scenarios they associate with being afraid and to draw a picture of each scenario in one of the squares. Then ask them to write other words that are related to the word *afraid* next to the pictures they drew on the concept map. The purpose is to help students learn to use *afraid*

appropriately in different contexts. Teachers can use a similar concept map to teach other vocabulary, or they can create their own concept maps if necessary.

2. To encourage the students to make predictions, do not pass out copies of the storybook at this stage. Instead, read the first two pages of the story and then ask the class to predict how the story will continue. Next, read the third and fourth pages and discuss the differences between their predictions and what actually took place in the story. Do the same for several pages—the students make predictions, read more of the story, and discuss—until the students are comfortable with making predictions.

3. Stop reading at a pre-selected page of the story and have students work with their partners and jot down their predictions for what remains. Students record their predictions on a concept map they create themselves or on one provided for them. (See Figure 2.)

Instructions:
Record your predictions of the story in the blank boxes. You may draw pictures or write a few words to record your predictions. You may also ask for more copies of this sheet if you need to add events to your prediction.

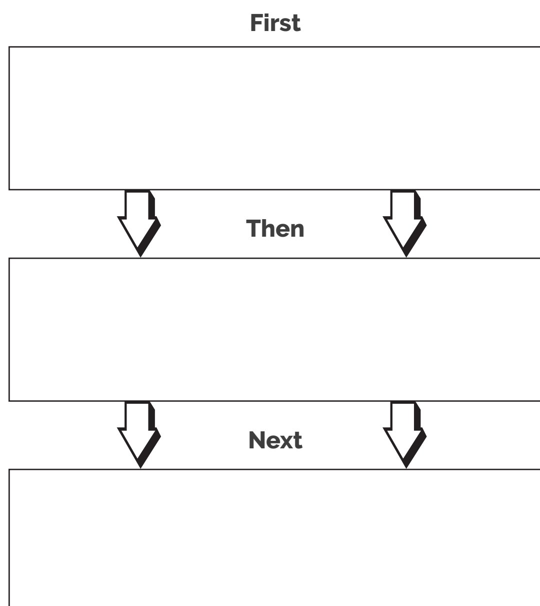

Figure 2. Concept map for making predictions

4. Give students copies of the story and ask them to read it silently on their own and at their own pace. Give students enough time to process and comprehend the story individually before they join their partners for further discussion.

5. Show the student pairs a chart created in advance (Figure 1) to illustrate the chronological order of the events that take place in the book. Explain that there is no finite number of events in the story because some readers may add events that were not included on the list, while other readers may exclude events on the list. Tell students that what is important is not the total number of the events but whether their predictions are presented in proper time sequence. Students then discuss the differences between their own predictions and what actually happens in the book.

6. Invite the students to share their predictions and justify their answers with the class. In the meantime, the teacher assesses whether the students were able to make predictions effectively.

7. Teach skills in making inferences. Explain that sometimes messages in a story are not told directly or explicitly to the readers. However, we can discover indirect messages if we pay close attention to the hints in the story. Ask students to fill out a generic concept map for making inferences (Figure 3). This concept map consists of two sections: "What I Read" and "What I Found Out."

8. Demonstrate how to record information in the "What I Read" section by pointing out a few main ideas in the book. For example, to model this task to the young learners in our class, we recorded a main idea from the text on the book's

What I Read

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________

What I Found Out

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________

Figure 3. Concept map for making inferences

first page by writing "Loved lima beans … didn't eat them." Then we asked our students questions such as, "Why didn't Camilla eat lima beans even though she loved them?" We invited the students to give reasons that were not stated explicitly in the story. If a student's reason is "All of her friends hated lima beans," we would respond, "You are right. That reason is stated in the book. Can you guess why it matters to her whether her friends like or hate lima beans?" If the student's response is "Because she wants her friends to like her," "She likes to please her friends," or "She wants to make more friends," we would respond, "Yes. Although the sentences on Page 1 do not tell us directly what you just said, your reason is probably right. It seems that Camilla didn't want to do things her friends hated." We then recorded the students' inferences in the "What I Found Out" section on the concept map.

9. Ask the students to practice this activity in pairs. Each student takes notes and writes inferences on the concept map for making inferences and then, with partners, students explain what they wrote in each section.

10. In Step 8, examples were given to demonstrate how to record on the "What I Read" and "What I Found Out" sections. Step 10 provides more opportunities for practice by sharing the student-generated examples with the class. For example, when one of our students wrote in the "What I Read" section, "Camilla loves lima beans, but she never ate them because her friends hate lima beans," we encouraged the student to explain what kind of person Camilla is. We said that the author never tells us directly what type of person Camilla is. She might be shy, for example, or she might be unfriendly, or students might have other ideas. We encourage them to find out about Camilla's personality by paying close attention to the details the author gives us in the book. The most common response we receive is "lonely." We then record the students' responses in the "What I Found Out" section. Practice this step by using several examples created by the students in the "What I Read" section to help them fill out the "What I Found Out" section until they are comfortable working in pairs independently.

11. Assess the students' reading comprehension and skills in making inferences by asking two open-ended inferential questions based on the story:

    - Why is Camilla so eager to fit in with her classmates?
    - Do you think Camilla's classmates are her true friends? Why or why not?

ADAPTING CONCEPT-MAPPING LESSONS

Throughout the process, it is important for the teacher to make necessary adjustments to the activities based on each student's unique

learning needs, language proficiency level, and progress. For example, if students cannot spell certain words or express their thoughts in sentences while filling out the concept maps, they may be allowed to draw pictures to express their thoughts. If a student is not able to write a full sentence due to a lack of language proficiency, a few key words or short phrases should be acceptable.

Concept maps are an effective teaching tool, and the ones included in this article can be adapted for many types of reading lessons. Stories offer a multitude of additional concept-map possibilities for lessons, such as the reading questions and tasks below:

- What are some of the main ideas in the story? Please create concept maps to express your ideas.

- What are the details that support each main idea in the story? Please create concept maps to express your ideas.

Finally, when selecting stories for young EFL learners, teachers should ensure that the stories (1) have a clear chronological order to help young learners follow the storylines without getting confused; (2) have easy-to-understand plots so that the students can find the important characters, settings, and events from the stories and record them on the concept maps; and (3) allow young learners to relate the stories to their daily-life experiences. This is especially important when one objective of a lesson is to teach the students how to make inferences. When young learners can more easily activate resources from their own background knowledge, they will be more confident and capable of analyzing texts and making inferences based on what they read.

CONCLUSION

When we taught the two lessons described in this article, we observed our young readers learn to visualize their thoughts and organize their ideas by using concept maps we created for them and those they developed on their own. Throughout the activities, they reinforced knowledge they had learned previously and discovered links between ideas. In the process, they also showed their confidence and competence in making predictions and inferences. We hope that other teachers who incorporate concept-mapping activities into their lessons will experience similar success.

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Adeline Teo is an assistant professor at Fu Jen Catholic University. Her research interests include dynamic assessment, ESL literacy development, and gender equity in English language textbooks.

Yun F. Shaw is an assistant professor at Huafan University. His areas of focus are second language acquisition and the use of digital media in language learning.

Jimmy Chen is an MA (multimedia track) student in the English Department at Fu Jen Catholic University.

Derek Wang is an MA (multimedia track) student in the English Department at Fu Jen Catholic University.

APPENDIX

Pre-Made Chart for *Frozen*