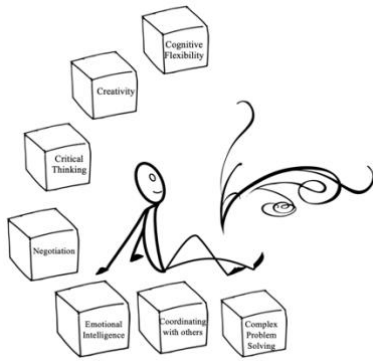


# Scaffolding using Visual Memory (Secondary)



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*theory behind scaffold...*

Using scaffolds is one way of breaking the traditional teacher-centred model of all knowledge coming from one sole source (the persona at the front of the room.) Scaffolds help students to learn and store information so that *they* become reliable warehouses of knowledge.







How can we create this dynamic? Well one way is to give our students the opportunity to use visual memory. You'll see how this promotes active participation in assimilating lower-level fact-based information. We need a strong foundation of facts to be able to process information and then reach our own conclusions - higher-level progression.\*

The example below uses material for a music class (taught in Valencian), so you'll see how you can use it for virtually any subject taught in any language.

\*Read more about [Bloom's Taxonomy](#) of thinking at this site.

## Step by Step:

1. Choose 6-10 images and/or text that are key to the unit you are about to begin. (See example below from a chemistry class.)

<p><b>Solar Energy</b> Solar panels are used to obtain electricity or heat.</p> 	<p><b>Wind or Hydraulic Energy</b> These originate from the movement of air and water respectively.</p> 	<p><b>Energy from organic material</b> Organic waste or wood contain chemical energy which can be transformed into electricity or heat.</p> 
<p><b>Kinetic Energy</b> Bodies with kinetic energy are those which are in motion.</p> 	<p><b>Light Energy</b> Light energy appears in the form of light.</p> 	<p><b>Sound Energy</b> Sound energy is transmitted by bodies when they vibrate through sound waves.</p> 

2. Place the images on slides in a PPT that you can project and where everyone in the class can see easily, or print them out and give one set to each group.
3. Explain to students that they are going to see images (and /or text) for 30 seconds and then will write down everything they can remember about all of it.
4. On your signal, the Moderator of each group turns the paper over (or you turn off the slide in the PPT) and each students has 60 seconds to write down everything they can remember - images and text.

(The first time, you may want to give the students the opportunity to see the images again for another 30 seconds, just to get used to the dynamic.)

5. Group members then work together to check each other's work and fill in any information they missed.
6. When you have shown all the slides or students have interacted with all the printed images, give the lower- and higher-order thinking question about the visual and/or linguistic information. Students can use the notes they've taken to answer these questions, but they can't look at the images/text again. *(See examples below.)*

#### ***Example of Lower-Level Thinking Questions***

(Answers can be found directly from the text underneath the images.):

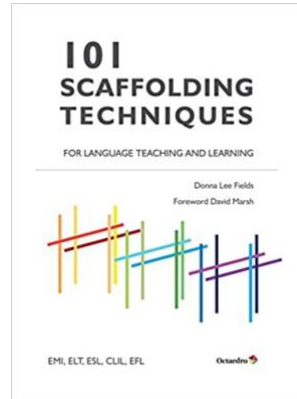
1. The sound of the sea is a type of \_\_\_\_\_ energy.
2. Which energy appears in the form of light?
3. \_\_\_\_\_ energy originates from the movement of air and water respectively.
4. \_\_\_\_\_ contain chemical energy which can be transformed into electricity or heat.
5. \_\_\_\_\_ are used to produce solar energy?
6. Bodies with \_\_\_\_\_ energy are those which are in motion.

#### ***Example of Higher-Level Thinking Questions***

(Answers are creative):

1. If you were given charge of a budget to build an energy plant. What type of energy would you choose to use? Justify your decision.
2. What are ways to take advantage of sustainable energy?
3. Etc.

7. *Reflection*: Students write 150-200 words on how effective the dynamic was in their assimilation of the information.
8. *Translanguaging*: In pairs, write 2 types of energy in Spanish, and what they are generally used for. Debate which is more effective in English.



9. [amazon.com](https://www.amazon.com)