

Guide to the Reading: *Make It Stick*: Chapters 3–8

CSC131 The Beauty & Joy of Computing

04 September 2018

Questions on readings in *Make It Stick*

1. How has Principal Roger Chamberlain responded to charges that his approach substitutes rote learning for learning that enables students to evaluate claims, generate their own arguments, and apply knowledge in unfamiliar contexts?
2. Why did Mia Blundetto learn how to parachute jump?
3. Which use of a bowline did the authors suggest? Is this the best knot for the suggested use. Search on the Web for an answer.
4. The authors want to persuade us that forgetting can be a good thing. To make this point, they give us examples of...
 - someone learning a foreign language
 - someone learning to drive
 - someone learning how to use a computer

What has to be forgotten in each case?

5. The baseball players at California Polytechnic State University enjoyed what advantage (that is, what did they gain?) when thrown 15 consecutive curve balls? What was the drawback to this kind of practice?
6. What is a mental model?
7. What is transfer of learning?
8. Experiments have shown that blurring the letters on a page, replacing some letters with blank spaces, and presenting ideas in a lecture in a different order than those ideas appear in the textbook all have what effect?

9. List several questions that you might ask yourself during a reflection upon a lecture, reading, exercise in the laboratory, field trip, or other learning experience.
10. What does Bonnie Blodgett mean when she refers to herself as “The Blundering Gardner?”
11. Define “desirable difficulty.”
12. Create a story that will help us understand the meanings of some of these phrases. Invent one or more characters. Write 128–256 words. Use your imagination. Incorporate four or more of these phrases into your story.
 - “hunger for narrative”
 - “memory can be distorted”
 - “imagination inflation”
 - “suggestion”
 - “interference”
 - “curse of knowledge”
 - “hindsight bias” (also called “knew it all along effect”)
 - “the feeling of knowing”
 - “fluency illusions”
 - “social influence”
 - “false consensus effect”
13. What did scientists at the Massachusetts Institute of Technology discover about how dyslexic patients process information in their visual field of focus and in their peripheral vision, respectively?
14. Neil Fleming has described different ways that a person might like to learn. An acronym helps us remember that these preferences. What does VARK mean?
15. Kenneth Dunn and Rita Dunn created a catalogue of six components of a person’s learning style. What are those six aspects?
16. One way of identifying learning styles contrasts opposites.

styles of perceiving:	concrete
modes of processing:	active experimentation
styles of organizing:	random