

Think-Pair-Share Activities for Videos on How to Study

Note for Instructors

In August 2011, I posted a series of brief videos on YouTube about how to study effectively in college. They can be found at www.samford.edu/how-to-study. From my own experience and feedback from teachers and students, it quickly became clear that many students, especially the ones who most need help with study skills, require some kind of scaffolding activities to help them understand and utilize the information in the videos. They really weren't grasping it by just viewing the videos. I decided to create a set of Think-Pair-Share questions based on the videos that instructors can use to promote discussion of the information. I know other faculty have also developed activities using the videos. I welcome feedback about these activities and any suggestions for modifications, additions and other kinds of activities.

These are Think-Pair-Share questions. The item is presented to the class. First, each student should think of their answer to the question and be prepared to explain their reasoning. Next, students pair up and discuss why they chose respective answers and not others. Finally, the class discusses the question and possible answers as a whole. The teacher reveals and explains the answer.

Some of these questions overlap. Instructors should select the ones they think will be most useful. These questions can be easily modified to be used as quiz or "clicker" questions.

Video 1:

1. Which of the following statements does **NOT** reflect a mistaken belief about learning that can undermine learning?
 - a) I plan my study so that I finish reading all the assigned material the night before the exam.
 - b) I won't do well in my science class because I'm just not good at science.
 - c) I write out the definitions of key terms on note cards and memorize them.
 - d) I keep my phone and computer on while I study so I don't miss any texts or updates from my friends.

2. Which of the following is an example of poor metacognition?
 - a) Joe failed an exam because he memorized definitions but his professor tested him over comprehension.
 - b) Amy felt confident she did well on the exam but was stunned to find out she barely made a D grade.
 - c) Cindy studied by reading her notes and her textbook over and over again, but still made a bad grade.
 - d) Sam thought he could learn the material well enough if he just read the chapter summaries, but he ended up failing the exam.

3. Many first year students have poor metacognition, which could result in which of the following:
 - a) They are likely to stop studying before they truly understand a concept
 - b) They believe they have a complete understanding of a concept when really their understanding is shallow, with both gaps and misconceptions.
 - c) They feel they do not need to radically change their study habits when they really need to do so.
 - d) They will overestimate how well they do on exams.
4. Which of the following statements is TRUE about multitasking?
 - a) People have a pretty accurate sense of how good they are at multitasking
 - b) You become better at multitasking the more you do it
 - c) Younger people who have been raised with technology are good at multitasking
 - d) Multitasking virtually always hurts performance compared to focusing on one task at a time.
5. The danger of using note cards to study is that
 - a) They promote the tendency to memorize without understanding concepts
 - b) They promote the tendency to learn isolated facts
 - c) Creating them out makes you feel like you are studying when you really are not
 - d) All of the above are dangers of using note cards

Video 2:

6. Which of the following is the most important ingredient for learning?
 - a) The intention and desire to learn
 - b) Paying close attention to the material as you study
 - c) Learning in a way that matches your personal Learning Style?
 - d) The time you spend studying
 - e) What you think about while studying
7. Which of the following statements is true?
 - a) The more you pay attention while studying, the more you learn.
 - b) Students who are more motivated to learn will learn more.
 - c) Students who spend more time studying will learn more.
 - d) Any study strategy will lead to learning.
 - e) Taking notes using a laptop computer leads to better learning.

Video 3:

8. Which of the following does **NOT** represent studying at a deep level?
 - a) As I read, I relate the information to what I already know.
 - b) As I read, I relate the information to my own personal experience
 - c) As I read, I think of the key distinctions between this concept and other concepts I've learned about.
 - d) As I read, I repeat the information to myself multiple times.
 - e) I often close the book and my notes and just try to write out all the information I can remember on my own.

9. Say you were assigned to read the story of *The Three Little Pigs* for a class. Which of the following does NOT represent deep processing of the story?
- a) It involves a bad wolf, just like Little Red Riding Hood. Wolves are often evil in fairy tales.
 - b) The key to the story is the different priorities of the three pigs for selecting building materials for their houses.
 - c) Pig 1-straw; Pig 2-sticks; Pig 3-bricks
 - d) I should try to explain the story as I understand it to a classmate to see if I can explain it clearly
 - e) Asking yourself, "How does the moral of the story apply to my own experience?"

Video 4:

10. Which of the following is NOT a purpose of note taking?
- a) Recording key information from the presentation
 - b) Recording as much of what the professor says as possible
 - c) Engaging you meaningfully in the presentation
 - d) Creating memory cues in your notes that will help you recall the important themes of the presentation.
11. Which of the following strategies could be used instead of memorizing note cards to promote deeper learning?
- a) Concept mapping
 - b) Self-testing
 - c) Question generation
 - d) None of these methods are as good as creating and memorizing note cards.
12. When highlighting while reading a text, the best way to achieve deep processing is to
- a) Highlight the key terms and definitions, especially if they are bolded
 - b) Highlight complete sentences and even whole paragraphs if necessary
 - c) Highlight the topic sentence of every paragraph
 - d) Read the text multiple times and highlight only the key portions of the material.
13. Which of the following is **NOT** a rule for effective group study?
- a) There should be a goal for the study session
 - b) Everyone come prepared to participate, for example by having read the chapter and having generated three possible test questions
 - c) Everyone one in the groups should have similar learning styles
 - d) Every group member should be able to describe the understanding developed by the whole group.

Video 5:

14. Which of the following is **TRUE** regarding improving your study skills?
- If you follow the advice in the videos, you should see rapid improvement
 - Developing a good study strategies will take time and there will likely be set backs
 - What constitutes good study strategies will be different for different students and different subjects, but they will follow the principles of deep processing.
 - If your study strategies are strenuous, difficult and time consuming, then that means they are effective.
15. If you blow and exam, which of the following should you do?
- Review your exam to try and figure out where your study strategies went wrong
 - Create a workable plan for improving your study strategies and implement it right away
 - Don't bother seeing your teacher unless you fail multiple exams and it becomes really clear you need help.
 - Consider your poor performance a fluke and plan to study the same way for the next exam.
16. According to the videos, which of the following statements are TRUE concerning poor study skills?
- Poor study skills increase confidence without increasing learning
 - Poor study skills are mindless or make you focus on superficial aspects of the material
 - Poor study skills are often similar to good study skills, but they don't make you think meaningfully about the material.
 - Poor study skills take time and effort to change and improve.
 - If you use study skills that are too shallow for how the teacher tests, you will fail regardless of how much you study and how motivated you are.

Answer Key

Here are the answers (at least, my answers).

- All the alternatives reflect mistaken beliefs
- Alternatives b and d are both examples of poor metacognition. Alternatives a and c simply represent bad study strategies.
- All of the alternatives are consequences of poor metacognition
- Alternative d is the correct answer. The other alternatives represent beliefs that students feel are true, or want to be true, but research is quite clear they aren't. Some students might argue that alternative b is true, but I'm unaware of research that supports the idea. What tends to improve multitasking is when one or more of the tasks becomes automatic from repeated practice, thus taking less mental effort. This rarely occurs in classes where most information is new. Furthermore, research indicates that people who believe they are good at multitasking often are terrible at it.
- Alternative d is correct. Note cards can be used effectively as long as students study the information conceptually and they make linkages among the concepts. The problem is that the temptation is to memorize isolated facts and spend more time making the note cards than studying them. Although it is true that preparing note cards is better than not studying at all, there are better methods of study, such as concept maps or making note cards of self-testing questions for you to answer.

6. Alternative e. This is straight from the video. Some people wonder why the pleasantness rating group (deep processing) remembers the same amount as the control group which was just instructed to learn the words. Remember, these were highly meaningful and familiar word pairs. The performance of the deep processing groups and the control groups represents optimal group performance for this material. (There are individual differences in peoples' ability to memorize words.) The point of this experiment was to show that first, shallow strategies actually undermine performance over what it can be and second, intention to learn is not as important as the strategies you use to process information.
7. All of these are false. These are common misconceptions students have about studying that the video seeks to debunk.
8. Alternative d. If you are mindlessly repeating information, that is superficial processing. Now if you are repeating it to keep it in mind so you can think about it meaningfully, then OK, that would be deep processing.
9. Alternative c. I was going for a simple example of applying the principles of the video. Some students may say that you do have to memorize the actual story. That may be true, but it doesn't represent deep processing and comprehension. And if you do understand the story, often it makes it easier to recall the story.
10. Alternative b. Note taking should not be mindless stenography. Note taking should help students engage in the class and students should think about what is being said and write down key points and memory cues. One danger of taking notes with laptops is that it promotes stenography and poorer learning.
11. Alternatives a, b, and c are all better alternatives than memorizing note cards. The key here is that rote memorization is a bad strategy. Students can use note cards as long as they don't just memorize them. Any of the three strategies can be used with note cards to go beyond memorization. The study strategies are all discussed in Video 4, albeit briefly.
12. Alternative d. Highlighting should be seen as an active, orienting task that makes the reader think about the material at a deep level. Only enough text should be highlighted to remind the reader of the key point in the text, which means that the reader has to read the text multiple times to select the key parts and that only parts of sentences might be highlighted. It is also important to note that students must review their highlighted text at a later time. They can't just read it once and highlight and expect to learn it.
13. Alternative c. Group study can be a complete waste of time or very effective. Alternative c is the only one that is not related to running an effective study group. It actually goes back to Video 1 which says that there is nothing to so-called learning styles.
14. Alternatives b and c. The other alternatives get at misconceptions about improving study skills. Students probably won't see a rapid improvement because usually their bad study habits are overlearned and hard to change. They will have to try different strategies to find what is right for them, and there will likely be set backs in terms of some poor test performances. There is no single recipe for effective study for all students for all subjects. The videos provide a framework for students to develop effective learning strategies for themselves, but the exact strategies will differ from student to student and from subject to subject. Finally, just because you are studying hard does not mean you are studying effectively. Learning is hard work, but not all hard work leads to learning.
15. Alternatives a and b. This is from the video. Don't wait until you have failed multiple exams before taking action.
16. All of the alternatives are true.