

What Students Can Do To Improve Information Processing

Learn to monitor your own thinking processes. It is not necessary (or even advisable) to do this all the time, but by noticing how it feels to pay attention or what goes on in your head when you think about something, you can learn to process information more efficiently.

1. Try to pay attention to only a few things at a time.
2. Practice ignoring things that you don't want to pay attention to, as well as attending to those things that you do want to pay attention to. Sometimes not paying attention to irrelevant events and information is more important than paying attention to relevant information.
3. If you find it necessary to deal with several new pieces of information at one time, try to combine them into a smaller number of items. You can often do this by "chunking" - that is, by grouping similar pieces of information together while you study them.
4. If you find it necessary to deal with several new pieces of information at one time, use notes, pictures, or diagrams to help you keep the information actively available in your mind.
5. Become as active as you can be in the learning process. By becoming more active, you will automatically find more ways to connect the new information with what you already know. The following are some good ways to become active while you learn:
 - Underline selectively while you study.
 - Draw diagrams while you study.
 - Outline important ideas while you study.
 - Ask yourself questions before you read part of a textbook, and then see if you can answer them after reading that part of the book.
 - Look for ways to apply what you are studying in one class to issues in another class or to problems outside the school setting.
6. Study with a friend. Explain your ideas to your friend and listen to your friend's ideas. Tell one another what you think is right or wrong about the summaries or applications.

7. Remember that all the ideas in the previous list can backfire. For example, if you underline too much, you may stop thinking about what you are doing. If you study with a friend, you may let the friend do all the thinking. When applying these strategies, remember that it is crucial that *you become an active thinker*.
8. Try to make sure you understand the information clearly and correctly before you practice it. (Otherwise, you may have to unlearn the wrong information before you can learn the correct information.) Some good ways to make sure you understand are to ask yourself questions, to summarize information for a friend and see if the friend agrees with you, and to ask the teacher questions.
9. Once you think you have learned something, practice it even a little longer than you think necessary to master it.
10. Find out what skills are basic - that is, what skills will be important to help you understand later information. Practice these until they become "second nature" to you.
11. Don't study at the same time things that you are likely to confuse with one another.
12. When you learn something new that resembles something you already know, focus your attention briefly on *both* the aspects that are similar and the aspects that are different. Be sure you can tell them apart.
13. In general, follow the guidelines in the "What to Do" lists accompanying each step of information processing in this chapter.