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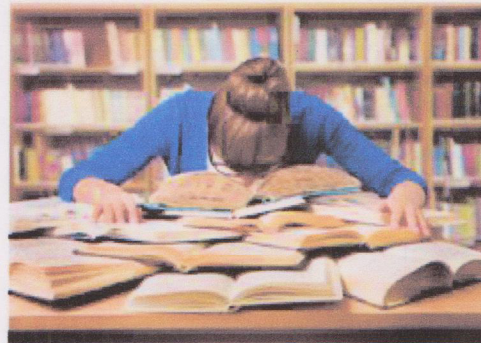
4 science-backed ways toward better learning (Hint: drop the highlighter)



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We have all done it. We are reading something we want to remember later and out comes the highlighter. Green, yellow, blue, sometimes multiple colors at once to differentiate the importance of words in sentences.



Even though highlighting is a widespread practice to help us learn and remember information, it actually does very little. In fact, in some situations highlighting can prevent us from using knowledge to make inferences in the future. Highlighting, it turns out, isn't the only common strategy that doesn't really help you learn. Others include underlining and rereading, which are popular study tools but are not effective.

So, what is a learner to do? Recent journal articles and the book *Make It Stick* point us in the direction of effective learning strategies. Here are four of them.

1. **Quiz yourself frequently on the material you read.** Make flashcards of important topics you read. Generate questions and answers from the material and regularly quiz yourself. Keep retrieving knowledge from your memory. It will prevent forgetting and allow you to identify areas you do not know to focus future study.
2. **Space out your studying and quizzes.** Spread out when you quiz yourself by hours, days, weeks, and months. As you gain mastery over the material, keep spacing the quizzes further apart.
3. **Quiz yourself on different topics in each study session.** For example, if you are studying for a biology test, don't just study the chapters in order. Mix in questions from different

chapters as you study. Interleaving, or alternating topics, will improve your ability to remember and apply information in the future.

4. **Ask yourself questions while you are reading.** These can include "Why?" questions. Why is this happening? Why does this make sense? Or why does this not make sense? Asking why will help you process the information you are reading and apply it in future situations. Questions can also help you process and make meaning of the information you have just read. For example, you can ask yourself, "What new facts did I just learn?" after reading a paragraph. "How do these new facts relate to facts I already know?" "What were the main themes of what I read?" "Why are these themes important?" "What further questions do I have?"

So, keep this article handy and use it to practice these methods. Quiz yourself on what you've just read, space out self-quizzes, keep quizzing yourself on the definitions of different strategies along with other information you are trying to learn, and ask yourself questions about the content, meaning, and applicability of the material while you are reading.

But please, put down the highlighter!

Sources

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