Research-Based Learning Strategies

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| **Retrieval Practice** |  | **Interleaving** |  | **Spaced Practice** |
|  |  |  |  |  |
| What is it? |  | What is it? |  | What is it? |
| Deliberately recalling information without looking it up or referencing any other resource. Focus on what information you can produce rather than only focusing on consuming information (re-reading, “going over” notes, etc.) |  | Mixing up the types of practice problems you’re working so that consecutive problems cannot be solved by the same strategy. This strategy can work well in many math and science courses that commonly use assignments that require you to solve one or two types of problems with the same strategy. |  | Distribute your study time over several days or weeks rather than only the night before or day of the test. Spaced practice is the opposite of cramming. It is more valuable to study for 3 one-hour segments over the course of a week than it is to study for 3 hours the day before the test. |
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| How to use it: |  | How to use it: |  | How to use it: |
| * + - * Brain dump – Write or say everything you can recall about a particular subject. Revisit lecture notes or your textbook to identify any key information that you didn’t recall. * Notecards – Don’t look at the answer on the back until you’ve done your best to try to recall it. Sort your cards into piles based on if you’ve successfully recalled all the information or not so that you can identify what you need to work on more. * Take a practice test in a test-like environment. Use resources such as your notes and textbook, to check your answers. Repeat this process periodically. |  | * Create your own study guide by mixing up past homework or test problems. Practice solving the problems in test-like conditions. Consider starting by working some of the problems in the middle of the chapter and then working problems from the beginning and end. * If you’re given a study guide, work the problems out of order. * If you’re using notecards, mix them up so that you aren’t reviewing information in the same order that it was covered in class. |  | * Make a study plan. You can use the template on the back of this paper to make a plan for when, where, what, and with whom, and for how long you will study. Adjust as needed but stick to the plan as much as possible so you don’t find yourself cramming. * Break up big concepts into smaller chunks so that you’re able to quickly review them. * Make sure that your study materials are easily accessible so that you don’t have to waste a lot of time gathering them every time you study. |

References: https://www.cultofpedagogy.com/powerful-teaching/; https://www.retrievalpractice.org/library

Making a Plan

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| --- | --- | --- |
| *What are three locations where you will be able to study effectively?* |  | *What materials do you need?* |
| 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | * Textbook * Notes * Handouts/Study Guide * Laptop * Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |  |
| *What time(s) of day will you be most focused and motivated to study?* |  | *Who can help you?* |
| \_\_\_\_:\_\_\_\_ AM/PM - \_\_\_\_:\_\_\_\_AM/PM  \_\_\_\_:\_\_\_\_ AM/PM - \_\_\_\_:\_\_\_\_AM/PM  \_\_\_\_:\_\_\_\_ AM/PM - \_\_\_\_:\_\_\_\_AM/PM |  | * Friends, classmates * Tutors, SI Leader, Writing Tutor or Writing Fellow * Faculty (Office hours) * Mentor, advisor |

7 Day Study Plan

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| --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Day 1*** | ***Day 2*** | ***Day 3*** | ***Day 4*** | ***Day 5*** | ***Day 6*** | ***Day 7*** |
| ***Class(es):*** |  |  |  |  |  |  |  |
| ***Topics:*** |  |  |  |  |  |  |  |
| ***Activities:*** |  |  |  |  |  |  |  |
| ***Recommended Activities:*** | * Organize materials * Make notes to connect ideas or explain the concepts in your own words. **Don’t waste time simply re-reading or skimming!** * Divide topics by those you know very well, moderately well, and not at all. * Make a plan for reaching out to people who can help. | * Start with **most difficult** topics. * Create study aids (practice tests, flashcards, charts or diagrams) * Review ideas for most difficult concepts: meet with people who can help and ask questions, Google the topic with “pdf” for other examples, watch YouTube or Khan Academy videos | * Continue studying **most difficult** topics. * Review ideas for most difficult concepts: meet with people who can help and ask questions, Google the topic with “pdf” for other examples, watch YouTube or Khan Academy videos | * Complete practice problems and use study aids * **Re-assess** what you know and don’t know | * Review concepts that you know **moderately well**. * Meet with people who can help. | * Review concepts that you know **moderately well**. * Meet with people who can help. | * Final Review * Work on **connecting** all the concepts you’ve been studying. * Focus on the areas you know you are the weakest and the material that you anticipate will be worth the most points on the test. |

Reference: https://www.k-state.edu/aac/academic-coaching/academicsuccesstools/7%20Day%20Study%20Plan%20v.3.pdf