"Blanking out"

One of the most frustrating situations in math is to feel you know the material (and have usually worked very hard to do so) and then be unable to remember any of it when faced with problems on a test. Students often refer to this as "blanking out." In my work with students I usually find one or more of the following issues:

Anxiety issues

Anxiety can affect memory in two ways. It can compete with or even shut down the brain's reasoning processes, interfering with retrieval of anything that isn't automatic. But it has also been shown to decrease working memory, a critical skill needed in mathematics.

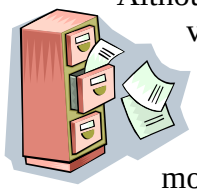
- Get proficient with relaxation techniques so you can apply them more automatically
- Try Heartmath's concepts! In general, they teach techniques to think from your heart rather than your brain, and it slows your heart rate. At http://www.heartmath.org go to the Education tab and then College Students for some specific techniques.
- You may have developed a self-perception that you will blank out. If so, work on countering that schema/perception and reframe it with positive plans.

"True" knowing of material

Learners often believe they "know" material because they understood it in class and did their homework. But these are input and supported-learning situations; a test is output without support. As described in "Levels of Assistance" handout, you should be at standby or independent level on the material before you take a test.

- Try to teach someone else. Putting it into words helps your verbal retention.
- Copy the problems from your quizzes and take them like a test.
- Work some problems in pairs on the board during our class – the discussion helps.
- Frequently recycle through previous material. Pick 2-3 problems from prior sections and work them without looking back at how they were done.

How information is being stored or retrieved



Although students of all learning styles may have difficulty remembering material for a test, visual, global learners are the most likely group to use the phrase "blanking out" because that's what it feels like. These students store information in "big picture" images, so without the support of examples, and especially if there is anxiety, these students may be facing a blank wall of ideas on what to do with a problem. If their learning style modality is different from their retrieval modality, the issue could be even more complex.

- Experiment with mixing modalities. You may need to spend more time verbalizing as you learn, or focus specifically on steps, or other changes.

Pure memory disorder

Some students have memory retrieval difficulties with all subjects, and remembering procedures in math is part of the general issue.

- Focus on using organization and memory mnemonic techniques to reduce the amount to remember and cue you to the process.
- Recycling, relearning and re-testing yourself will be constant. You need to retrieve – not practice – many more times than other students.

An important note to all of this: you should try to recreate the "blanking out" situation repeatedly in safer environments so you can try out various coping techniques and strategies.

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