Preventing (or alleviating) excessive test anxiety among students  11/30/06
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Simply put, **test anxiety** refers to stress or anxiety that significantly reduces students’ performance on tests. While Spielberger et al (1976) describe test anxiety as being “a situation-specific personality trait” (Zeidner, 1998), it should be noted that students accomplished in becoming test-anxious may become highly agitated several hours, days, or weeks prior to a test and may stay agitated following tests.

"... students with true test anxiety tend to be consumed with worries, such as fear of failure, worthlessness, and dread. In turn, they experience physiological symptoms, such as sweating, dizziness, and racing heartbeats. Some have more traumatic symptoms, including crying and bedwetting the night before a big test; on the day of the test, some throw up or pass out” (Susan Black, quoting John Zbornik, a psychologist with Ohio’s Lakewood City Schools, 2005).

Many students with severe test anxiety in the lower grades do not progress to college (Zeidner, 1998). However, Zeidner notes that researchers estimate that 15 to 20% of college-level students experience significant test anxiety. Test anxiety is often a multi-system response to a perceived threat, since it affects students on three levels: physical, emotional, and cognitive.

Multi-system (college-level):
- Students may experience physical symptoms such as headaches, nausea, faintness, feeling too hot or too cold, sweating, rapid breathing, muscle tension, or general tension.
- Others experience emotional tension leading to irritability, frustration, and inability to cope.
- The major problem of test anxiety is its effect on thinking ability: it can cause reduced concentration and comprehension, “blanking out” learned material, or racing, inefficient thoughts.

Test-anxious students tend to have an exaggerated perception of threat and intense emotional reactions as well as reduced self-efficacy, self-derogatory thoughts, and anticipatory failure attributions (Zeidner, 1998). Therefore, they may feel that the result of this test is vital to their happiness and their ability to retain a scholarship or even to survive as a student, future wage earner, and/or as a lovable son/daughter/father/mother/husband/wife or child of God. Specific concerns are that:
- I will perform inadequately; I will not achieve the necessary perfection or to my own expectations.
- The reward for doing well on the test is ultimately desirable. (Note: this contributes to anxiety as the perception of challenge is raised by the saliency of the reward (Bandura, 1997).
- Other students are more prepared regarding the specific test material, are more skilled at testing, or are faster and smarter.
- The instructor is tricky, uses confusing wording, and throws in material we haven’t studied.
- I always study the wrong stuff.
- There’s never enough time.

Why do we care if students fail due to test anxiety?
- In the preface to his book on test anxiety (1998), Moshe Zeidner, wrote, "Test anxiety is a ubiquitous phenomenon, with some degree of evaluative anxiety being experienced by most people in modern society" (ix-xii). He added that tests have significant long-term
consequences and that the debilitating effects of test anxiety have “... important practical implications for a person's goals and future career.” 

Note: Depending on factors in the educational situation, test anxiety may vary by age, gender, and socio-cultural background (Zeidner, 1998).

- Test anxiety is a learned behavior and a growing phenomenon: "Beidel and Turner say test anxiety has become far more prevalent over the past 30 years, affecting up to 40 percent of third- through sixth-graders at levels ranging from moderate to severe. They attribute the increase to several factors, including greater pressure from teachers and parents to succeed, more testing in the early grades, and the high stakes (such as retention and graduation) associated with many standardized tests" (Zeidner, 1998).

- Teachers can reduce or alleviate the incidence of test anxiety among their students.

**Teacher behaviors that increase test anxiety:**
- Have contact with students only in formal settings.
- Emphasis on the lecture.
- Assume students understand how to learn within the discipline
- Single-style approach to learning.
- Instructor is sole authority.
- Class/curriculum is competitive and exclusive.
- Grade depends solely on written tests.
- Single-focus topic.
- Greatest emphasis on grade
- Emphasis on required learning.
- Strict, do well or die attitude.
- Talk and pace while students are testing.
- Test emphasis on timing.

**Teacher behaviors that decrease test anxiety:**
- Student-teacher contact in a variety of settings.
- Emphasis on active learning.
- Be explicit about learning tools/techniques/resources unique to discipline.
- Respect for diverse talents/approaches to learning.
- Peer interaction encouraged.
- Learning is collegial, collaborative, and study groups are encouraged.
- Grade may be enhanced by papers, projects, homework, or class participation.
- Interdisciplinary approach.
- Greatest emphasis on learning & growth.
- Emphasis on relevant learning.
- Humorous, realistic approach.
- Respect students’ need to concentrate.
- Test emphasis on demonstration of knowledge.

(“Behaviors” primarily taken from Test Anxiety, The state of the art, by Moshe Zeidner, 1998)

Additional ways to encourage and motivate learning without raising anxiety over testing:
- While teaching the course, share strategies that helped you learn when you were a student.
- Provide explicit ideas on what is basic need-to-know information, then provide a sample showing how that information is useful in answering an application-level test question.
- Show how material is relevant and integrates in meaningful ways with applications, other disciplines, or higher learning. (This “sets the stage” for global learners.)
- Prior to handing out the test, have students do the following together: take a deep breath in through the nose and as they exhale through the mouth, let their eyes close and shoulders relax. On the second breath, have them repeat, “All I can do is my best.”
- Allow students to use scratch paper and encourage use of a data dump.
- Allow additional time, or retakes as a take-home test for extra credit (Davis, 1993).
• Make the first exam relatively easy. Early success in a course increases students' motivation and confidence (Lucas, 1990) and students who do well on the first test generally improve their grades on subsequent tests (Guskey, 1988) (qtd. in Davis, 1993, at http://teaching.berkeley.edu/bgd/allay.html). (many more ideas at this website!!)

• Schedule extra office hours before tests & review sessions before exams. Especially encourage study group visits during office hours. (http://teaching.berkeley.edu/bgd/allay.html)

• Ask students how you can help them feel less anxious. Students often make requests that faculty can easily accommodate, such as providing information about the test format, offering a review session, or refraining from walking around during the exam (Mealey and Host, 1992; qtd. in Davis, 1993, at http://teaching.berkeley.edu/bgd/allay.html).

• If students experience problems with multiple choice questions and/or bubble sheets they may have a visual or learning disability. Refer them to the FYI program in 120 SUB.

• If you feel students are failing to prepare adequately for tests, refer them to FYI or TRiO SSS.

Sources:


“See, it’s not what you say; it’s what they hear.”
--Celtics Coach Red Auerbach

“Unless people believe they can produce desired effects by their actions, they have little incentive to act.” --Albert Bandura, 1997
Proven Academic Success Tips:

1. **Go to class.** This involves getting enough sleep to function reasonably, knowing when and where classes meet, and making attendance a priority. Sounds easy, doesn't it…? *(Note: Professors can grade on attendance.)*

2. **Review notes for 10-15 minutes right after class** to improve comprehension of classroom discussion and to note relationships of material covered to text, labs, demonstrations and other knowledge. By reviewing notes right after class and again while studying, the entire class discussion will be saved in your long-term memory (note, Memory requires 17 seconds of attention per item.). Statistics show that with immediate review 83% of class discussion is retained in memory 9 weeks later; in contrast, waiting even one day to review notes drops memory of class discussion to 14%.

3. **Articulate complex concepts.** To be sure you understand concepts fully before the test, put them in your own words, in writing, out loud, or in your head. This *active learning strategy* is necessary for both reading and lecture materials, and occurs well in study groups, thru journaling, and with tutors. Don't wait for tests to find out what you don't know!

4. **Use a study sheet and “data dump” for tests.** *(Proven way to increase test scores & reduce test anxiety!!)*

   Step 1: Create a study sheet: Identify and organize important information such as names, dates, formulas, and important concepts that you must know for tests on a study sheet several days before a test.

   Step 2: Organize the material keeping mnemonic (memory-assist) strategies in mind; make it brief enough to memorize (no more than 2 sides of a sheet of paper), and visually accessible (outline rather than paragraph style).

   Step 3: Memorize the material (not as hard as it sounds) then set your study sheet aside, get out fresh paper and see if you can re-create the sheet. If it is well-organized, most can memorize the material in only 3 or 4 attempts.

   Step 4: In addition to readings texts, working problems, and other study needs, check yourself with your study sheet repeatedly to be sure it is in your longterm memory, and do a final check before testing.

   FINAL STEP: When given the test, before looking at it, re-create your study sheet in the margins, on scratch paper, or on the back of the test, essentially "dumping" memorized material from your brain and leaving it free to think. *(Do this because memory and thinking interfere with each other: once you start thinking, memory is impaired.)*

5. **Miscellaneous tips:**

   - Procrastination is often the result of perfectionism coupled with fear of failure. Tell yourself to give it your best effort and to concentrate on the value of learning rather than concern over the grade.

   - Manage your time: Make a study plan including recreation as well as class and study time. Find & use those missing minutes & hours. **NOTE: 2, 3, & 4 above can be done effectively in 10-30 minute increments!**

   - Eat well, exercise regularly, and rest.

   - Study early in the day is 1.5X more effective than evening study, even for evening people.

   - Repetitive physical activity aids memory. Try pacing, walking or biking while memorizing.

   - Set intermediate goals. Break large hurdles into smaller tasks and reward yourself for accomplishments.

   - When you finish one assignment, do the first step of another before taking a break. It's easier to finish an already-begun assignment than to begin a new one.

   - Reaching educational goals takes both intelligence and persistence. The semester is only 15 weeks—persist!

   - Don’t wait for situations to reach crisis proportions before communicating with professors or accessing tutoring, study skill help, and other resources.

   - Think like a professor: predict test questions by considering how material could be applied & how it is relevant.