

Motivating Students and Helping Them Succeed

Suggestions from Introductory-Level Classes with Major and Non majors

On the Cutting Edge: Early Career Geoscience Faculty Workshop – June 2009

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STUDIES AND QUOTATIONS USED IN THIS PRESENTATION COME FROM THESE SOURCES:

- **Blink, The Power of Thinking Without Thinking**, Malcolm Gladwell, 2005, Little, Brown & Company Publishers [BLINK]
- **Stumbling on Happiness**, Daniel Gilbert, 2006, Alfred A. Knopf Publisher [SOH]
- **Yes! 50 Scientifically Proven Ways To Be Persuasive**, N.J. Goldstein, S.J. Martin, and R.B. Cialdini, 2008, Free Press Publishers. [YES!]

SOME QUESTIONS TO PONDER:

What motivates me when I'm taking a class?

What saps my motivation?

GROUP SHARING ACTIVITY

SOME ANSWERS

Most motivational attributes of a class	Least motivational attributes of a class
• Students are engaged and asking questions • Subject matter personally interesting • Teacher is motivated – enthusiastic, enjoying herself, professional • Textbook is interesting • Feeling like I accomplished something (good grade is one example) • Can participate in class • Topics are explained well • Efficient and a purpose • Class is required • Class is a chosen JOY!!! • If information is useful to my life – can see the connections. • Rewarded/recognized for progress...	• Wasted time • Topic I don't care about • Too easy • Busy work • Too hard (unprepared) • Instructor doesn't stick to their own expectations • Too early • Instructor overestimates audience level • Instructor disorganized – no plan! • Instructor disinterested. • Learning for a grade (grade focused)

MORE QUESTIONS TO PONDER:

Who are our students? What do they care about? What motivates them?	<i>Introductory courses bring a diverse group of students:</i> • Recent high school graduates • Workforce graduates (postponed college) • Professionals looking for career changes
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What causes our students to lose their motivation?

Students lose their motivation when they're not performing well.

How can we help our students perform well?

Good study skills improve student performance.

What study skills will help OUR students?

(Each instructor might require some distinct skills for his or her type of teaching.)

How can we teach study skills WHILE we teach our classes?

WAYS WE CAN MOTIVATE OUR STUDENTS

Improve student performance by teaching them good study skills:

Set high expectations

THE BEST WAY THE I'VE FOUND TO GET STUDENTS TO MEET HIGH EXPECTATIONS IS SIMPLY TO EXPECT IT! Then help them reach those expectations with:

- Office hours
- Tutors
- Study sessions led by mentors on content + key skills like studying for exams, reading the chapter, taking notes, and more.

Get students to read and review

Assign reading and then quiz students with questions from the reading

Remind them to review last week's material and then quiz them with questions from last week.

Use homework and in-class activities that encourage efficient, effective studying by:

- Writing out answers, in their own words, from their own understanding
- Explaining their answers or their understanding to other students in groups
- Practicing quantitative problems and problem solving through extra drill-style handouts
- Completing study sheets prior to exams (requiring that they review and write out answers to basic questions prior to coming to the exam)

Demonstrate the skills yourself.

- Memorize your students names and other facts throughout the semester and show them the method and time it takes
- Grade your tests and assignments right away and thoroughly
- Tell students you'll research the answer to questions you don't know how to answer in class (and then do it!)

MOTIVATIONAL TIPS FROM BEHAVIORAL PSYCHOLOGISTS

- It reduces our anxiety when we have control over our performance
- Avoiding loss motivates us more than getting something new
- We are drawn to things that are like us, especially our names
- People want to follow social norms
- We most remember highs and lows
- We remember most what we heard last
- We most remember errors we don't want to make
- Questions and mysteries last longer in our memories
- Most of us think we're better than we really are
- Appealing to our best qualities gets us to do the right thing
- The words we hear affect our performance
- Larger tasks make regular tasks seem smaller
- We will give more if we're *asked for just a little*
- Some progress makes it more likely we'll finish
- Fewer choices means more buy-in

It reduces our anxiety when we have control over our performance

"Anticipating unpleasant events can minimize their impact... Apparently, three big jolts that one cannot foresee are more painful than twenty big jolts that one can." [SOH]

--Unpredictable Sudden Increases in Intensity of Pain and Acquired Fear, A. Arntz, M. Van Eck, and P.J. de Jong, 1992, Journal of Psychophysiology 6:54-64.

"People find it gratifying to exercise control – not just for the futures it buys them, but for the exercise itself. Being effective – changing things, influencing things, making things happen – is one of the fundamental needs with which human brains seem to be naturally endowed, and much of our behavior from infancy onward is simply an expression of this penchant for control... The fact is that human beings come into the world with a passion for control, they go out of the world the same way, and research suggests that if they lose their ability to control things at any point between their entrance and their exit, they become unhappy, helpless, hopeless, and depressed." [SOH]

-- Self-Efficacy: Toward a Unifying Theory of Behavioral Change, A. Bandura, 1977, Psychological Review 84:191-215;

-- Self-Efficacy: Mechanism in Human Agency, A. Bandura, 1982, American Psychologist 37:122-47.

-- Helplessness: On Depression, Development, and Death, M.E.P. Seligman, 1975, San Francisco: Freeman Publishers.

Classroom strategy: Set expectations clearly at the beginning. schedule exams and projects well in advance and make sure students know what to expect for these.

Suggestions for making students feel in control

- Make a clear syllabus and keep to it
- Be consistent in your classroom policies and expectations
- Provide resources to help them achieve your expectations (tutors, office hours, worksheets, study guides, etc.) Mentors who have taken the class before...
- Avoid curving to the students in the class – let an A one semester mean the same as the next (this is easier when you keep and use the same exams – it is difficult to do your first few years, when you are setting your standard, but it is a good goal for future years). Set expectations based on the classes that come next in the sequence and what students should know in those – thus giving you a strong support system when questioned by students
- Give students regularly scheduled quizzes to get an idea of what to expect on exams.
- Let students review old exams or find some other way to let them know ahead of time what content the exams will cover and what form it will be in.
- Pass sheets for intro classes...
- Choose a good textbook – one the students will actually read (and maybe even enjoy!)
- Keep the class on track (find a way to address off-topic questions outside of class or save them for extra-time days)
- Incorporate a basic flow to the week, so the class has some predictability (you can specifically set aside times to be flexible).
- Have goals (class objectives) that students can clearly identify and check to see where they are and where they've been (examples: weekly – or topical – study guides or question sheets)

Avoiding loss motivates us more than getting something new

"Loss Aversion – the idea that people are more motivated to avoid losses than they are to acquire gains. ... if you're hoping to persuade your colleagues to work with you... it's important to point out not just what they stand to gain in terms of opportunities and experience but also that they stand to lose out on those very same factors" if they don't participate! [YES!]

-- Coca-Cola's Big Fizzle, J. Greenwald, 1985, Time, July 22, 1985.

-- The Real Coke, the Real Story, O. Thomas, 1986, New York: Random House

Classroom strategy: To encourage new behaviors, be sure to stress that students will lose something they currently have if they do NOT change. For example, "You will lose my passionate eager teaching if you continue to come in late and stress my already thin patience!" or "Don't lose the good grade you already have by failing to study for the final!"

We are drawn to things that are like us, especially our names

Bringing up similarities that you share with a person will make them more predisposed toward your product/message. Including similar names!!! [YES!]

-- What's in a name? Persuasion perhaps. R. Garner, 2005, Journal of Consumer Psychology, 15:108-16.

"...if you're designing a program, initiative, or product that's being tailored for a specific client, you can harness the power of people's natural tendency to be attracted to things that remind them of themselves in name, title, or label that you give it. Specifically, you should name it based on the client's name or even just the first letter of the client's name." [YES!]

-- Why Susie sells seashells by the seashore: Implicit egotism and major life decisions. B.W. Pelham, M.C. Mirenberg, and J.T. Jones, 2002, Journal of Personality and Social Psychology, 82:469-87.

-- How do I love thee? Let me count the Js: Implicit egotism and interpersonal attraction. J.T. Jones et al., 2004, Journal of Personality and Social Psychology, 87:665-83.

-- Name letter branding: Valence transfers when product specific needs are active. M. C. Brendl et al., 2005, Journal of Consumer Research, 32:405-15.

"one study found that food servers at one restaurant increased their tip size by nearly 70% simply by matching their customers' verbalizations after receiving the order, as opposed to saying "okay!" or "coming up!" Behavior mirroring also works – stance, arms, etc. In a negotiation study, two parties where one mirrored reached a deal 67% of the time; where no mirroring happened, 12.5% of the time! Experimenters believe these behaviors engender likeability and trust. [YES!]

-- Mimicry for money: behavioral consequences of imitation, van Baaren, R.B. et al, 2003, Journal of Experimental Social Psychology, 39:393-98.

-- The Chameleon effect: the perception-behavior link and social interaction. T.K. Chartrand and J.A. Bargh, 1999, Journal of Personality and Social Psychology, 76:893-910.

-- Chameleons bake bigger pies and take bigger pieces: Strategic behavioral mimicry facilitates negotiation outcomes. W.W. Maddux, E. Mullen, and A.D. Galinsky, 2008, Journal of Experimental Social Psychology, 44:461-68.

Classroom strategy: Learn your students' names. Use them in class when you describe processes and new ideas. When students ask questions, mirror their behavior and repeat their question as precisely as you can.

People want to follow social norms

Social proof – if everyone else is doing something, it must be worth it – even more so if those people are part of our social group.

“Operators are waiting, please call now.” Changed to “If operators are busy, please call again.”
Result is that sales increase. [YES!]

Instead of simply asking that towels be recycled and not replaced daily, the sign says other guests have been doing it increases participation rate by 26%; when the sign says that other guests in that specific room have done it, participation increases by 33% total. [YES!]

“It is usually beneficial for us to follow the behavioral norms associated with the particular environment, situation, or circumstances that most closely match our own environment, situation, or circumstances.” (Example – behavior in a library.) [YES!]
-- The silence of the library: environment, situational norm, and social behavior. H. Aarts and A. Dijksterhuis, 2003, *Journal of Personality & Social Psychology* 84:18-28.

Example: “Your heritage is being vandalized every day by theft losses of petrified wood of 14 tons a year, mostly a small piece at a time.” Result: increased theft from 2.92% of the material easily available with no sign to 7.92% with the above sign. A sign saying “Please don’t remove the petrified wood from the park, in order to preserve the natural state of the Petrified Forest” resulted in 1.67% loss. [YES!]

-- Crafting normative messages to protect the environment. R.B. Cialdini, 2003, *Current Directions in Psychological Science*, 12:105-9.
-- Managing social norms for persuasive impact, R.B. Cialdini et al., 2006, *Social Influence*, 1:3-15.
-- Using social norm as a lever of social influence. N.J. Goldstein and R.B. Cialdini (2007) in *The Science of Social Influence: Advances and Future Progress*, A. Pratkanis, (ed.), Psychology Press, (167-91).

“An assistant stopped on a busy New York City sidewalk and gazed skyward for 60 seconds. Most passersby simply walked around the man without even glancing to see what he was looking at. However, when four other men were added to that group of sky gazers, the number of passersby who joined them more than quadrupled.” [YES!]
-- Note on the drawing power of crowds of different size. S. Milgram, L. Bickman, and L. Berkowitz, 1969, *Journal of Personality & Social Psychology*, 13: 79-82.

Praising the middle of a spectrum, however, can bring the lower part up, but also the higher part down. Be sure to praise the higher part – this is where you want performance to go, and it will keep them high. [YES!]
-- The constructive, destructive, and reconstructive power of social norms. P.W. Schultz et al., 2007, *Psychological Science*, 18:429-43.

Classroom strategy: Show students how others like them have performed well in this class in the past. Student performance will drop if “everyone else is doing poorly” or rise if they can see that many others are doing well. *When giving back test results, don’t mention the folks that have done poorly – don’t make people feel that the company of poor performers is large, even if it is! To keep the low performers thinking about performing well and to keep the high performers pushing themselves, be sure to give kudos to those are doing well – either with compliments or smiley faces. I find that my high performers are pushed by competition; when they see the class grades posted in descending order, they want to be the high mark, and thus keep pushing themselves.

We most remember highs and lows

"We tend to remember the best of times and the worst of times instead of the most likely of times." [SOH]

Classroom strategy: Offer a diversity of teaching styles and in-class activities

We remember most what we heard last

"Memory does not store a feature-length film of our experience but instead stores an idiosyncratic synopsis, and among memory's idiosyncrasies is its obsession with final scenes." [SOH]

-- Duration Neglect in Retrospective Evaluations of Affective Episodes, B.L. Fredrickson and D. Kahneman, 1993, *Journal of Personality and Social Psychology* 65:45-55 and Summary Assessment of Experiences: The Whole is Different From the Sum of Its Parts, D. Ariely and Z. Carmon, 2003, in *Time and Decision*, ed. G. Loewenstein, D. Reda, and R.F. Baumeister (New York: Russell Sage Foundation), 323-49.

"Whether we hear a series of sounds, read a series of letters, see a series of pictures, smell a series of odors, or meet a series of people, we show a pronounced tendency to recall the items at the end of the series far better than the items at the beginning or in the middle." [SOH]

-- Retention as a Function of Serial Position, W.M. Lepley, 1935, *Psychological Bulletin*, 32:730

-- The Serial Position Effect of Free Recall, B.B. Murdock, 1962, *Journal of Experimental Psychology*, 64:482-88

-- A Comparison of the Encoding of Content and Order in Olfactory Memory and in Memory for Visually Presented Verbal Materials, T.L. White and M. Treisman, 1997, *British Journal of Psychology* 88:459-72.

Classroom strategy: End class with a review of the most important topics. Put the good stuff at the end!

We most remember errors we don't want to make

Fear is a useful motivational tool IF a clear plan to avoid the thing they're fearing is given. If not, the fear will paralyze. (Especially true for training firefighters)

"One group learned from case studies that described real-life situations in which other firefighters made poor decisions that led to negative consequences. The other group learned from case studies in which firefighters avoided negative consequences through good decision-making. [Experimenters] found that firefighters who underwent the error-based training showed improved judgment and were able to think more adaptively than those who underwent the error-free training. ... Case studies, videos, illustrations, and personal testimonials of mistakes should be followed by a discussion of what actions would have been appropriate to take in these and similar situations." [YES!]

-- Using "war stories" to train for adaptive performance: Is it better to learn from error or success? W. Joung, B. Hesketh, A. Neal, 2006, *Applied Psychology: An International Review*, 55, 282-302.

Classroom strategy: If there's something that your students fear (such as failure of the class or speaking up in class and looking stupid), give them a plan for avoiding that fear. Example: testimonials from past students who didn't read ahead or study and had to retake the class, but second time around did it right (or how they overcame other challenges)!

Questions and mysteries last longer in our memories

"People spontaneously try to explain events, and studies show that when people do not complete the things they set out to do, they are especially likely to think about and remember their unfinished business. Once we explain an event, we can fold it up like freshly washed laundry, put it away in memory's drawer, and move on to the next one; but if an event defies explanation, it becomes a mystery or conundrum—and if there's one thing we all know about mysterious conundrums, it is that they generally refuse to stay in the back of our minds. ... people are, in fact, more likely to keep thinking about a movie when they can't explain what happened to the main character." [SOH]

-- Interruption and Learning, G.W. Boguslavsky, *Psychological Review* 58:248-55 (1951)

Classroom strategy: End class with a question or mystery – students can research the answer and we can discuss it at the beginning of the next class.

Most of us think we're better than we really are

"Science has given us a lot of facts about the average person, and one of the most reliable of these facts is that the average person doesn't see herself as average. Most students see themselves as more intelligent than the average student. ... 90% of motorists consider themselves to be safer-than-average drivers, and 94% of college professors consider themselves to be better-than-average teachers. Ironically, the bias toward seeing ourselves as better than average causes us to see ourselves as less biased than average too. As one research team concluded, 'Most of us appear to believe that we are more athletic, intelligent, organized, ethical, logical, interesting, fair-minded, and healthy—not to mention more attractive—than the average person.'" [SOH]

-- Managerial Myopia: Self-Serving Biases in Organizational Planning, L. Larwood and W. Whittaker, 1977, *Journal of Applied Psychology* 62:194-98.

-- Ambiguity and Bias in the Self-Concept, R.B. Felson, *Social Psychology Quarterly* 44:64-69.

-- An Exploration of the Perceptions of the Average Driver's Speed Compared to Perceived Driver Safety and Driving Skill, D. Walton and J. Bathurst, 1998, *Accident Analysis and Prevention* 30:821-30.

-- Not Can but Will College Teachers Be Improved, P. Cross, 1977, *New Directions for Higher Education* 17:1-15.

-- The Bias Blind Spot: Perceptions of Bias in Self Versus Others, E. Pronin, E.Y. Lin, and L. Ross, 2002, *Personality and Social Psychology Bulletin* 28:369-81.

-- Lake Wobegon Be Gone! The "Below-Average Effect" and the Egocentric Nature of Comparative Ability Judgments, J. Kruger, 1999, *Journal of Personality and Social Psychology* 77:221-32.

Classroom strategy: We are NOT our best and most objective observers! Remember this about yourselves and your students – it explains a lot of our behaviors including why students are always so surprised when they see their test results. Posting exam grades and cumulative course grades (anonymously but in descending order) is one way to help students see where they lie in the group and give them a better sense of reality.

Appealing to our best qualities gets us to do the right thing

Labeling technique – assign a trait, attitude, belief, or other label to a person, and then make a request of that person consistent with that label. People told that they were “above average citizens likely to vote and participate in political events” came to see themselves as better citizens and were 15% more likely to vote in an election 1 week earlier. “when teachers tell children that they seem like the kind of students who care about having good handwriting, the kids spent more of their free time practicing their handwriting—even when they thought no one was around to watch.” [YES!]

-- The effect of experience: A matter of salience? A.M. Tybout and R.F. Yalch, 1980, *Journal of Consumer Research*, 6:406-13.

-- Undermining the undermining effect of reward on sustained interest: When unnecessary conditions are sufficient. R.B. Cialdini et al., 1998, *Journal of Applied Social Psychology*, 28:249-63.

Mirrors and pictures of eyes will make people more likely to reflect on their behavior and act in more socially desirable ways. (Halloween – take ONE piece of candy then leave – 33.7% of kids take more unless a mirror is there, in which case only 8.9% take it!) “...video surveillance ... is not only costly, but sends a signal to employees that they’re not trusted—a prospect that can actually lead to greater employee theft down the line, not less.” [YES!]

-- Self-awareness and transgression in children. A.L. Beaman et al., *Journal of Personality and Social Psychology*, 78 :605-19.

-- A focus theory of normative conduct: When norms do and do not affect behavior. C. A. Kallgren, R.R. Reno, and R.B. Cialdini, 2000, *Personality and Social Psychology Bulletin*, 26:1002-12.

-- Cues of being watched enhance cooperation in a real-world setting. M. Bateson, D. Nettle, and G. Roberts, 2006, *Biology Letters*, 2:412-14.

Classroom strategy: Assume the best of your students and include them in those assumptions – they will give more! This is especially useful for exam preparation, homework completion, coming to class on time, getting them to seek help when they need it, and discipline problems. Examples: “I know you value the learning experience of all your fellow students and wouldn’t want to disrupt that...” In areas of high graffiti or theft, mount mirrors of pictures of famous or inspiring people to add some extra “eyes” to the situation. “I know each of you wants to do well in this class. I know that if you had time to do the homework and prepare for class you would... I know you value the time of your fellow students and your instructor... I know you...”

The words we hear affect our performance

“... volunteers watch a computer screen on which words appear for just a few milliseconds; they are unaware of seeing the words and are unable to guess which words they saw. But they are influenced by them. When the word *hostile* is flashed, volunteers judge others negatively. When the word *elderly* is flashed, volunteers walk slowly. When the word *stupid* is flashed, volunteers perform poorly on tests. When these volunteers are later asked to explain why they judged, walked, or scored the way they did, two things happen: First, they don’t know, and second, they do not say, “I don’t know.” Instead, their brains quickly consider the facts of which they are aware (“I walked slowly”) and draw the same kinds of plausible but mistaken inferences about themselves that an observer would probably draw about them (“I’m tired”).” [SOH]

-- Category Accessibility and Impression Formation, E.T. Higgins, W.S. Rholes, and C.R. Jones, 1977, *Journal of Experimental Social Psychology* 13:141-54.

-- Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action, J. Bargh, M. Chen, and L. Burrows, 1996, *Journal of Personality and Social Psychology* 71:230-44.

-- The Relation Between Perception and Behavior, or How to Win a Game of Trivial Pursuit, A. Dijksterhuis and A. van Knippenberg, 1998, *Journal of Personality and Social Psychology* 74:865-77
-- Telling More Than We Can Know, Nisbett and Wilson.

"Imagine that I'm a professor, and I've asked you to come and see me in my office. You walk down a long corridor, come through the doorway, and sit down at a table. In front of you is a sheet of paper with a list of five-word sets. I want you to make a grammatical four-word sentence as quickly as possible out of each set. It's called a scrambled-sentence test. Ready?

01 him was worried she always
02 from are Florida oranges temperature
03 ball the throw toss silently
04 shoes give replace old the
05 he observes occasionally people watches
06 be will sweat lonely they
07 sky the seamless gray is
08 should now withdraw forgetful we
09 us bingo sing play let
10 sunlight makes temperature wrinkle raisins

That seemed straightforward, right? Actually it wasn't. After you finished that test—believe it or not—you would have walked out of my office and back down the hall more slowly than you walked in. With that test, I affected the way you behaved. How? Well, look back at the list. Scattered throughout it are certain words, such as "worried," "Florida," "old," "lonely," "gray," "bingo," and "wrinkle." You thought that I was just making you take a language test. But, in fact, what I was also doing was making the big computer in your brain—your adaptive unconscious—think about the state of being old. It didn't inform the rest of your brain about its sudden obsession. But it took all this talk of old age so seriously that by the time you finished and walked down the corridor, you acted old. You walked slowly."

-- John Bargh [BLINK]

"Psychologists staged an experiment in the hallway just down from one, John Bargh's, office. They used a group of undergraduates as subjects and gave everyone in the group one of two scrambled-sentence tests. The first was sprinkled with words like "aggressively," "bold," "rude," "bother," "disturb," "intrude," and "infringe." The second was sprinkled with words like "respect," "considerate," "appreciate," "patiently," "yield," "polite," and "courteous." In neither case were there so many similar words that the students picked up on what was going on. (Once you become conscious of being primed, of course, the priming doesn't work.) After doing the test—which takes only about 5 minutes—the students were instructed to walk down the hall and talk to the person running the experiment in order to get their next assignment. Whenever a student arrived at the office, however, Bargh made sure that the experimenter was busy, locked in conversation with someone else—a confederate who was standing in the hallway, blocking the doorway to the experimenter's office. Bargh wanted to learn whether the people who were primed with the polite words would take longer to interrupt the conversation between the experimenter and the confederate than those primed with the rude words. ... The people primed to be rude eventually interrupted—on average after about 5 minutes. But of the people primed to be polite, the overwhelming majority—82%—never interrupted at all. If the experiment hadn't ended after 10 minutes, who knows how long they would have stood in the hallway, a polite and patient smile on their faces? [BLINK]

-- John Bargh, Mark Chen, and Lara Burrows

-- The Role of Category Accessibility in the Interpretation of Information About Persons: Some Determinants and Implications, T.K. Srull and R.S. Wyer, 1979, *Journal of Personality and Social Psychology* 37: 1660-72.

-- Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action, J. A. Bargh, M. Chen, and L. Burrows, 1996, *Journal of Personality and Social Psychology* 71, no. 2: 230-44.

"Two Dutch researchers did a study in which they had groups of students answer 42 fairly demanding questions from the board game Trivial Pursuit. ½ were asked to take 5 minutes beforehand to think about what it would mean to be a professor and write down everything that came to mind. Those students got 55.6% of the questions right. The other half of the students were asked to first sit and think about soccer hooligans. They ended up getting 42.6% of the questions right." [BLINK]

-- The Relation Between Perception and Behavior, or How to Win a Game of Trivial Pursuit, A. Dijksterhuis and A. van Knippenberg, 1998, *Journal of Personality and Social Psychology* 74, no. 4: 865-77.

"Psychologists Claude Steele and Joshua Aronson created an even more extreme version of this test, using black college students and twenty questions taken from the Graduate Record Examination, the standardized test used for entry into graduate school. When the students were asked to identify their race on a pretest questionnaire, that simple act was sufficient to prime them with all the negative stereotypes associated with African Americans and academic achievement – and the number of items they got right was cut in half." [BLINK]

-- Stereotype Threat and Intellectual Test Performance of African Americans, C. Steele and J. Aronson, 1995, *Journal of Personality and Social Psychology* 69, no. 5: 797-811.

Classroom strategy: Be careful of the language you use and use it to your advantage. If you want positive, upbeat, energetic students, sprinkle the right words in your lectures. If you want students calm for exam taking and thinking positive, use similar words in your pretest conversation. If you really want your students to do well, have them answer, as their first question on an exam, something that requires them to use strong, positive, intelligent language.

Larger tasks make regular tasks seem smaller

"In the case of the Williams-Sonoma bread makers, the introduction of a more expensive bread maker made the original bread maker seem like a wiser and more economical choice in comparison." [YES!]

-- Get closer to your customers by understanding how they make choices, I. Simonson, 1993, *California Management Review*, 35:68-84.

"Prior experience colors perception." Picking up a 20-lb weight first makes the 10-lb weight not feel so heavy. [YES!]

-- Contextual contrast and perceived knowledge: Exploring the implications for persuasion, Z.L. Tormala and R.E. Petty, 2007, *Journal of Experimental Social Psychology*, 43: 17-30.

Classroom strategy: When you have a big task to request of your students, it might help to show them how even bigger a task you could be asking. For example, when I ask them to memorize a few divisions and ages on the Geologic Time Scale, I show them the entire scale first and let them think about memorizing the entire thing – then they're happier to know they only have to memorize a little. Asking students to complete a 10-page paper will seem great after hearing about 20-page papers!

We give more if we're asked for just a little

"Even-a-penny-will-help" "Just an hour of your time" "Just a little more clarity" "Even a brief initial phone call" – all produce MORE donation/benefit/etc. than asking for more. A LITTLE GOES FURTHER THAN A LOT! [YES!]

-- Increasing compliance by legitimizing paltry contributions: when even a penny helps. R.B. Cialdini and D. A. Schroeder, 1976, *Journal of Personality and Social Psychology*, 34:599-604.

Classroom strategy: If you want your students to change their behavior, instead of asking for the most you want, ask for just a little of it, and you're likely to get more. For example, "just a little more advance warning," or "just a little more explanation in your answers."

Some progress makes it more likely we'll finish

"The closer people get to completing a goal, the more effort they exert to achieve that goal." (8 car washes until free wash -- on one card, there are only 8 spots for sticker; on the other there are 10 spots with 2 stickers already added – for loyalty!) "People will be more likely to stick with programs and tasks if you can first offer them some evidence of how they've already made progress toward completing them." [YES!]

-- Shades of meaning: the effect of color and flavor names on consumer choice. E.G. Miller and B.E. Kahn, 2005, *Journal of Consumer Research*, 32:86-92.

"foot-in-the-door technique" – to get someone to do something big, first ask them for something smaller and get their buy-in to the entire process – then the bigger favor flows from it, because people have had a chance to get comfortable with the "project." (22% agreement to a large intrusive request; but for folks pre-screened with a minor request a few days earlier, 53% agreed to the large request) [YES!]

-- Compliance without pressure: The foot-in-the-door technique. J.L. Freedman and S.C. Fraser, 1965, *Journal of Personality and Social Psychology*, 4:195-203.

-- The "foot-in-the-door" technique, F. Green, 1965, *American Salesman*, 10, 14-16.

Classroom strategy: Break up large projects into small steps – get students to complete the first few steps, then show them, when the larger project's deadline looms, that they have already made it most of the way. For homework assignments, you can complete a few together in class (perhaps ones that were going to be part of the class anyway), then stress to students that they are already on their way to completing it and they'll likely put more energy into finishing it.

Fewer choices means more buy-in

Too many options is a problem – if it takes too long to decide, no decisions get made. (The more retirement plan options to choose from, the less likely a program will be chosen at all. But... autoenrolling folks and telling them they have to opt OUT – increased enrollment.) [YES!]

-- How much choice is too much? Contributions to 401(k) retirement plans, S.S. Iyengar, G. Huberman, and W. Jiang, 2004, in *Pension Design and Structure: New Lessons from Behavioral Finance*, O Mitchell and S. Utkus (eds.), Oxford University Press. (83-96)

-- The Paradox of Choice, B. Schwartz, 2004, New York: Ecco.

Classroom strategy: When assigning projects or papers, be careful about making the field too wide – if you want people to make good choices, make it easier and give them only a few.