I know I’m not supposed to stand up and lecture, but....

Me (fairly accurate representation)

Enthralled and totally engaged students
I do.
So, Why am I here, talking to you?

PowerPoint?

To tell you why I lecture.

To tell you what works for me.

To give you a couple of examples.

But....
- Esta Grossman
- Anne Heise
- Marvin Boluyt
- David Shier
- William Nevers
- David Wooten
- Brad Metz
- Mike Kielb
- Susan Star
- Mike Stribley
- Emily Thompson

And... The woman who simply does it all, including persuading me to do this presentation....

- Lisa Veasey  R
I have to know my strengths and weaknesses.

- **Strengths** (What *I* think my strengths are)
  - Remembering what it was like to be a student.
  - Remembering the kind of student *I was* in school.
  - Liking the subject I teach.
  - Wanting to tell other people about this subject.

- **Weaknesses**
  - Bill Clinton
  - Mammal grooming behavior
  - James Earl Jones-like voice?
  - No.
  - Procrastinator
What a choice!

- A) Sage on the stage or
- B) Guide on the side?
- I guess I have to say it without shame, I chose letter A.
- Though, I would call it “Teacher of biology stuff.”
- Am I also a scientist?
- Just ask any of my fellow biology teachers.
Who is Strayer?

- Small town
- Graduated high school
- 1 semester of community college, then...
Music and traveling until age 26.
- Back to school. Age 27 (better attitude this time)
- First 2 years at WCC
- Bachelors degree in biology from EMU
Secondary teaching degree (grades 7 – 12) from EMU

Taught 7th grade for one year

Then escaped

Masters degree in biology from EMU

Have taught here for 21 years (19 years as full-time faculty)

No arrests so far
So, Why do I lecture?

- **Good things about lecture:**
  - I’m in control of material: I can guide students through the maze of facts and the textbook.
  - I can think of stories and analogies (”hooks”) that the students usually can’t.

- **Problems with lecture:**
  - Talking students need to be kept in check.
  - Keeping students interested while I talk.
  - Those damn laptops, phones, etc.
  - Sleepers?
Why do I use PowerPoint?

- PowerPoint keeps me organized!
- Frees me up from writing on the board (for most stuff)
- It’s easy to use photos and pictures and videos
- Students have Course pack that includes all major headings of my slides.
2.2 Molecules and Compounds

- 7) Recognize and interpret the definition of molecule and ion
- 8) Recognize how (and possibly why) an ionic bond is formed (a PG love story)
- 9) Recognize how a covalent bond is formed (There's energy in these bonds!...and, a love story that is a bit more ... complex.)
- 9) Recognize why water is a good solvent (We will use the term polar covalent bond to interpret this idea.) Also, see the first paragraph on page 28 of the tb. Also, see fig. 2.9.
8. Recognize how (and possibly why) an ionic bond is formed. (A PG love story)
a. The reaction between a sodium atom (Na) and a chlorine atom (Cl) results in the formation of sodium ions (Na⁺) and chloride ions (Cl⁻) to form sodium chloride (NaCl).
Student evaluation comments (Strengths)

- He turns a somewhat boring subject into an interesting one through examples and enthusiasm.
- Puts in situations relevant to us like “cell love.” (?)
- Strayer relates his subject to everyday life as much as possible. Sometimes goes off on side tracks, but love him for it.
- Good breaks to break up class and give students a chance to re-energize.
- Pine cone love-hotels totally rock!
- I like the chocolate parking lot.
- Has a fascinating way of relating almost everything to ear wax and sex. Love the sex jokes.
Student evaluation comments (Weaknesses)

- Maybe too many sex jokes.
- Some students don’t like funny teachers.
- Doesn’t talk loud enough.
- Hard to hear
- Jokes pretty bad, but, he tries.
- Needs more class participation.
- Tests don’t reflect what we are supposed to know
Most of my students are taking the class because they need a science requirement, so, I have to make it relevant.

My student need to be engaged and kept off balance just a bit.

Science can be intimidating. Some material need stories, or “hooks”, to hang the facts on.
Beginning of the semester questions:

- Do oak trees have sex?
- Yes
Is your lawn sexually frustrated?

Yes.

Why?
The No-Sex-Machine!
Why are you breathing?
Is it possible to be a true vegetarian?
Can you really “light” farts?

- Yes
- 7th grade memory and see YouTube.
Fart Pants
Mosquitoes and life’s functions
This is adult **female** mosquito. She is A) **organized**
She needs to B) **acquire materials and energy**
Up close and personal
What’s in that tube?

Mouth parts
With “stuff” inside

Lower “lip”

Human skin
She needs to C) **reproduce**

(R rated photo. Cannot be shown)
She needs to D) **respond to stimuli**
A mosquito is E) **homeostatic**
Mosquitoes need to **grow and develop**

Photo of mosquito eggs
Close-up of a mosquito egg
Hatching mosquito egg. Larva stage is emerging.
Larva hanging in water with “breathing tubes” taking in oxygen
The larva molts into the pupa stage
The pupa molts and the adult emerges.
There. She finally made it. She is resting on the surface tension of the water.
Mosquitoes are G) *adapted to their way of life*
LEXINGTON MIDDLE SCHOOL

FINAL EXAMS
MAY 27 28 29
LAST DAY OF SCHOOL
MAY 29

www.allfunnypictures.com
Another example: Pine Trees

- What’s involved in pine tree reproduction?
- Little guys looking for love
- Waiting females
- Hotels of love
- Orphans
Pinus strobus
Eastern White Pine
Male cones produce pollen
Various pollen grains (little guys looking for love)
This is a cone where females live. There is a female under each woody “scale”
The sperm from the pollen grain then fertilizes the female. A seed develops from this fertilization.
It's Pretty funny how we can read this sentence with all these letters all out of place, and we can continue to keep reading and still make sense of what we are reading. No matter how many times you read this over and over you can still make sense of it. How is that possible?

As long as the first and last letter of the word is in its correct position, you can position the middle letters in any order and still make sense of it. Our eyes just glance at the first and last letters of a word.
What is really in lipstick?

- Acid (to “burn” color into lips)
- A little soap and vegetable shortening
- Castor oil (to take up the acid)
- Petroleum based wax (if you want lipstick in a tube). It’s the “stick” in lipstick.
- Food preservatives (the castor oil can get rancid)
- Fish scales (for that special “glisten”)

PARIS IN THE SPRING
Oh, the spontaneous combustion questions!