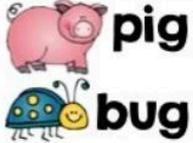
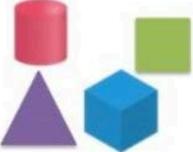
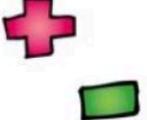




**My students just want  
to get the grade and get out.  
How can I generate interest for a topic they  
don't see value in?**

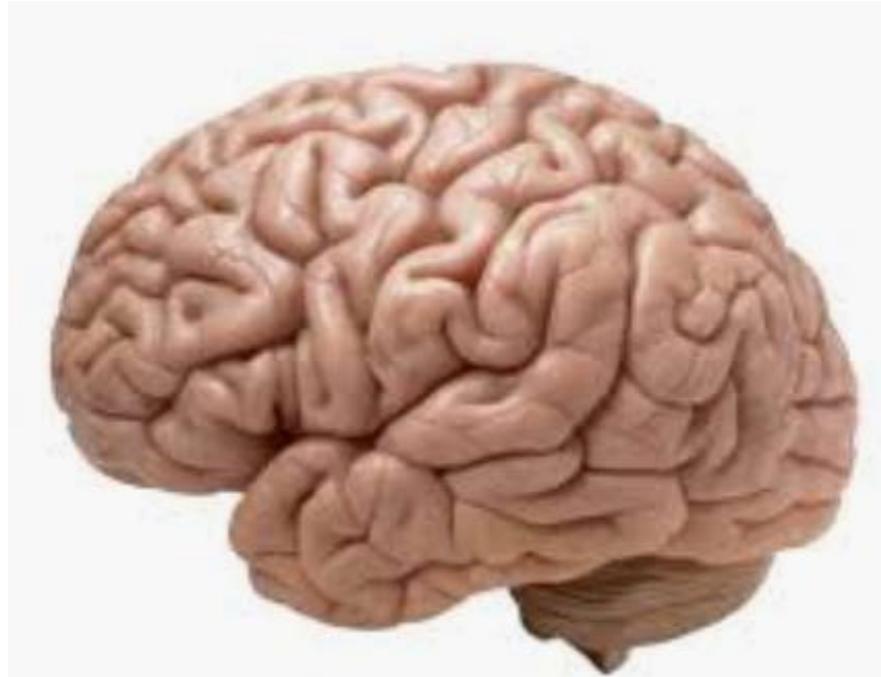
**Mike Morgan  
Professor of Psychology  
Washington State University Vancouver**

# My goal is to make you think about your teaching goals

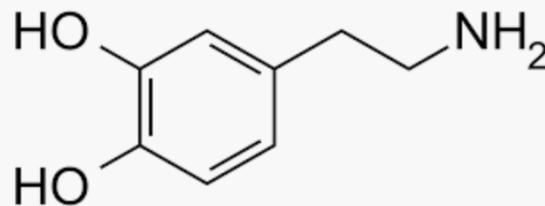
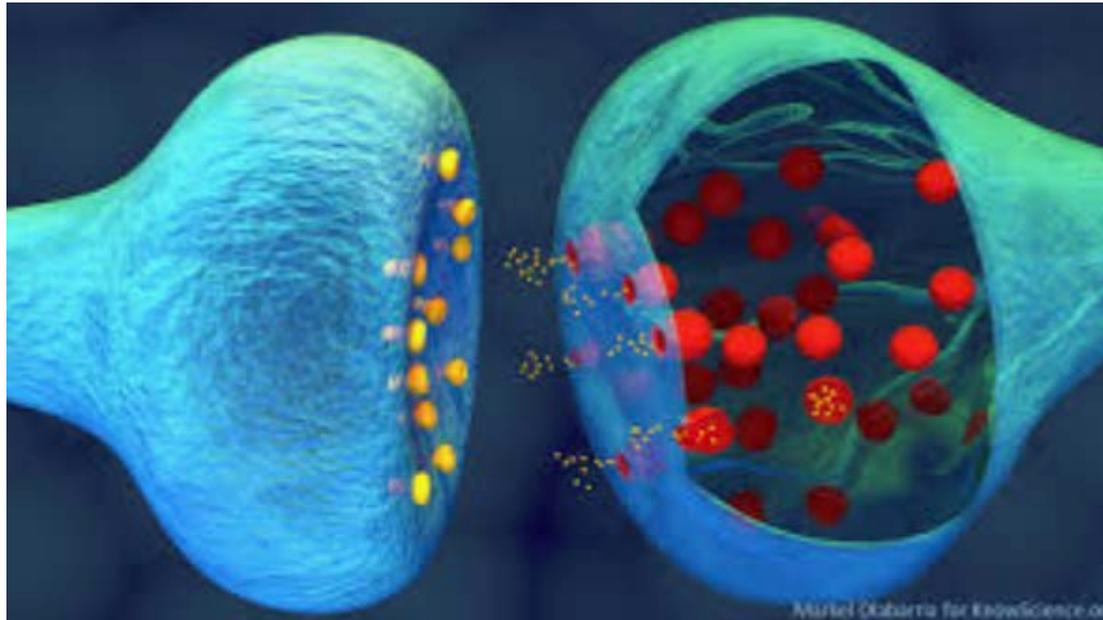
|   |   |  |   |
|---|---|--|---|
|  <p>I can write my first and last name!</p>                  |  <p>I know my colors!</p>                                      |  <p>I know all my letter names!</p>   |  <p>I know all my letter sounds!</p>   |
| <p><b>a e i o u</b></p> <p>I know all the vowels and their sounds!</p>  |  <p><b>pig</b><br/><b>bug</b></p> <p>I can read CVC words!</p> | <p><b>the can</b></p>  <p><b>see my</b></p> <p>I can read all my sight words!</p> | <p><b>the can</b></p>  <p><b>see my</b></p> <p>I can write all my sight words!</p> |
|  <p>I can rhyme!</p>  |  <p><b>/f/ /a/ /n/</b></p> <p>I can segment words!</p>         |  <p>I can identify shapes!</p>  |  <p>I can identify numbers 1-20!</p>   |
| <p><b>100!!</b> </p> <p>I can write the numbers 1-100!</p> |  <p>I can count to 100 by 1's!</p>                           |  <p><b>10's</b></p> <p>I can count to 100 by 10's!</p>                           |  <p>I can add and subtract!</p>  |

# **Neuro 301**

## **Foundations of Neuroscience**



# What neurotransmitter is involved in reward?



# Why am I teaching facts?



My goal is to help students prepare for a successful career

# Activity 1, Part 1

## (2 minutes)

What can you teach students that will be useful in their career?

(make a list)



# Activity 1, Part 2

## (5 minutes)

Work in groups of 4 or 5

1. Learn everyone's name
2. Make a list of things students need for a successful career
3. You will be graded on participation

Read one item from your list

# Does your list match mine?

1. Learn how to learn
  - Find & evaluate information
2. Ability to solve problems
3. Work effectively in a group



# Activity 1, Part 3

## (1 minute)

Secretly assign points to the people in your group based on their contribution (include yourself)

- Distribute 16 points for 5 people
- Distribute 13 points for 4 people

# Activities 1-3 is how I teach my neuroscience course

- Activity 1.1: Students read the assigned chapter as homework
  - Tuesday: Discuss content & take a brief quiz
  - Thursday: Final questions about the chapter
- Activity 1.2: Randomly assign students to groups to solve a problem (40 minutes).
- Activity 1.3: Secretly assign points to each group member (must include a justification).

# Activity 2, Part 1

## (2 minutes)

Make two lists (work alone):

1. What do you like about this approach?
2. What do you dislike about this approach?

# Move to a new group



# Activity 2, Part 2

## (5 minutes)

Work in groups of 4 or 5

1. What 2 things do you like the most about this approach?
2. What 2 things do you dislike the most about this approach?

Read one item from your “like” list

# The things I like best

- Students learn to work in groups
- Students come to class prepared
  - “I had to read the book in your class.”
- Students have to apply their knowledge
- Positive class atmosphere
  - Peers are collaborators, not competitors
- No exams (like the real world)

Read one item from your “dislike” list

# The things I dislike most

- Students complain about the grading
  - Peer input; Score is dependent on others
  - I drop the two lowest scores for each student
- Students who don't do the work
- Peer grading
  - Too generous with points
  - Students don't submit peer evaluations
- Assigning grades is complicated

# Activity 2, Part 3

## (1 minute)

Secretly assign points to the people in your group based on their contribution (include yourself)

- Distribute 16 points for 5 people
- Distribute 13 points for 4 people

# End of semester activity

- List 5 people you want in your group.
  - Include a convincing justification for each student

My students just want  
to get the grade and get out.

**How can I generate interest** for a topic they  
don't see value in?

- I don't know if interest is higher, but
  - Students are motivated
  - Students work hard
  - Attendance is good
  - Stress is low



# Peer grading is generous

|             |          |            |            |          |            |             |            |            |            |            |            |
|-------------|----------|------------|------------|----------|------------|-------------|------------|------------|------------|------------|------------|
|             | Mick     | Madonna    | Keith      | Alanis   | Cyndi      |             | Reba       | Garth      | Randy      | Loretta    | Ricky      |
| Mick        | 3        | 3          | 3          | 4        | 3          | Reba        | 4          | 4          | 4          | 2          | 2          |
| Madonna     | 3        | 3          | 3          | 4        | 3          | Garth       | 4          | 4          | 3          | 4          | 1          |
| Keith       | 3        | 3          | 4          | 3        | 3          | Randy       | 3          | 2          | 3          | 4          | 4          |
| Alanis      | 2        | 3          | 3          | 4        | 4          | Loretta     | 3          | 3          | 4          | 3          | 3          |
| Cyndi       | 4        | 5          | 3          | 0        | 4          | Ricky       | 3          | 3          | 3          | 4          | 3          |
| <b>Mean</b> | <b>3</b> | <b>3.4</b> | <b>3.2</b> | <b>3</b> | <b>3.4</b> | <b>Mean</b> | <b>3.4</b> | <b>3.2</b> | <b>3.4</b> | <b>3.4</b> | <b>2.6</b> |

|             |             |            |             |            |             |          |             |             |            |
|-------------|-------------|------------|-------------|------------|-------------|----------|-------------|-------------|------------|
|             | Jane        | Robert     | Reese       | Sally      |             | John     | Paul        | George      | Ringo      |
| Jane        | 3           | 3          | 3           | 4          | John        | 3        | 4           | 2           | 4          |
| Robert      | 4           | 1          | 3           | 5          | Paul        | 3        | 4           | 2           | 4          |
| Reese       | 3           | 3          | 3           | 4          | George      | 3        | 4           | 3           | 3          |
| Sally       | 3           | 3          | 2           | 5          | Ringo       | 3        | 5           | 2           | 3          |
| <b>Mean</b> | <b>3.25</b> | <b>2.5</b> | <b>2.75</b> | <b>4.5</b> | <b>Mean</b> | <b>3</b> | <b>4.25</b> | <b>2.25</b> | <b>3.5</b> |

# Peer ratings correlate with standard assessment scores

| Variable 1          | Variable 2       | Correlation (r) |
|---------------------|------------------|-----------------|
| Weekly peer ratings | Total quiz score | .43             |
| Group selection     | Total quiz score | .51             |
| Group selection     | Final grade      | .65             |

# Peer comments about the #1 student

- He was in my most recent group, and he had such fantastic **ideas**. I think he has fantastic **notes**, and it's amazing how his brain works. I think he is a great **team player** as well. He always **asks others opinions** and **is open to new ideas**, which I think is the best attribute when it comes to team players. Overall, he was a joy to be in a group with.
- Its obvious that he is not only the **smartest** in the class when it comes to information or giving answers but he is also **extremely kind** which is always nice to have
- This person is incredibly **intelligent**, and his understanding of difficult concepts is ideal. I would work with this person anytime because even though he knows more than anyone in the group he is **humble** and tries to **listen** to everyone and encourages every group member to participate by making everyone feel included.
- I would pick him because he has a really good handle on the material and he also extremely good at **explaining** it to others to make them understand it more.

# Peer comments about the #2 student

- is very **intelligent** and very **organized**; she understands the content and helps provide a thorough answer for the project prompts
- Incredibly helpful **notes** and amazing **hand writing**. Always very **friendly** and kept the team moving forward reminding everyone of the goals and objectives, time left, and feasibility all while including everyone's thoughts. A **great leader** in a team heading the ships direction typically with great results.
- very smart and remembers pretty much everything you say. I am impressed with her ability to **communicate with precision** and accuracy while being so concise. She's also **fun** to work with.
- Every time I am in a group with her, she always has amazing notes and great insight. Additionally, she is **diplomatic** and knows how to present a dissenting opinion in the right way
- She was kind and more **soft-spoken**, but she always knew her stuff and was always willing to write and **contribute** whatever she could.

# Student comments about the class

- The use of weekly group projects was something that required **adjustment** but once the initial anxiety wore off, it ended up being **a highlight of my week**. I have never had a course so effectively improve my comfort of **working in groups**. I think a big reason for this is that groups were random every week, instead of settling into a routine division of labor like in my lab groups, we had to be ready to adjust to the unique strengths of our group combinations every time we started a project.
- I put more **time** into this class than organic chemistry.
- **Quizzes were stressful**. There is only 5 points and there is too much pressure not to miss any, for it counts too much towards the grade. The group project was also difficult to achieve a 5 on. We were **also graded by our peers** for participation, and not every peer grades fair. The textbook **was difficult to read** and the students did not know what was expected of them. The text would at time make the material harder to understand. The teacher was clear in his explanations, however, the grading style presented in class was flawed. It would also be better if the material was put on a PowerPoint and **lectured to the class** instead of the students asking questions.

# Class organization should be consistent with your teaching goals

- A “flipped” class is not for everyone
- There are many ways to make your class interesting
- Tell students your goals and their relationship to the class organization

I'm curious to hear your thoughts



# Shy & anxious male: #3 in class

- the guy's a **genius** and knows what he's talking about. However, he's also **humble** about it, so he does let other people contribute to the discussion.
- Always knows his stuff! Without any notes! Cooperative. Doesn't **contribute** as much as he should, but can be drawn out.
- is on my team because of his amount of **knowledge** and understanding. He also did a good job of allowing **others** to give their own ideas.
- He is knowledgeable and is good at pointing out small details the group may miss. He come **prepared** all the time.
- tends to have a real deep understanding of the material and at times it seems as if he has the book embedded in his brain. Fortunately, he isn't loud or disrespectful and shares his input/ knowledge in a **respectful** manner while **listening** to other group member's input.

# 50+ year old woman: #2 in class

- is one of the most **intelligent** woman I have had the honor to meet at WSUV. Her **leadership** skills definitely improved throughout the semester.
- really smart and **fun** to work with, always has a smile!
- she explains topics very well and has very **organized** notes. She **lets everyone talk** and contribute equally. she works so well in groups.
- Kathy: She always comes very well **prepared** and ready to work.
- Always came up with a lot of **ideas**.
- Has more **experience** then the rest of us therefore she has more **wisdom** and is a great group member to work with.
- She is so **kind** and always **listens** to everyone and giving input where needed, normally she has great notes and makes sure to critically evaluate a scenerio.