






Initial Report

Last Modified: 04/24/2014

1. Because of online video lectures and in-class discussions, my ability to identify or recall information reflecting key concepts of the study topics has improved

#	Answer	Bar	Response	%
1	Strongly Agree		18	16%
2	Agree		39	35%
3	Neither Agree nor Disagree		22	20%
4	Disagree		20	18%
5	Strongly Disagree		13	12%
	Total		112	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.74
Variance	1.58
Standard Deviation	1.26
Total Responses	112

2. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
It is much easier for me to understand what the teacher is discussing during our class time. The in-class discussions are the main points that the teacher wants us to understand, which helps me learn the information because these are like practice questions to get us to think more about the topics.
I think that going over the video lectures on my own time before classes made it easier to understand the problem solving sessions we did do in class. I was able to learn and integrate the material quickly and effectively.
Video Lectures allowed me to learn the material when ever I wanted.
It would be better if the video lectures were posted several days before the lecture since they are over an hour long normally. The videos were posted the night before the class at 8 PM and we were expected to watch them before class, but this does not maximize the probability of students watching it.
The discussions helped
It highlighted important topics for quick review before in class discussions.
I am encouraged to read the textbook sections covering the key concepts in the video lectures and engage in learning the material this way.
My understanding has been reflected in my ability to reason and explain my exam and quiz answers.
The video lectures helped me to narrow the scope of my studying and helped me understand concepts that were previously unclear.
emphasis on what concepts were integral to the subject
I strongly believe that rarely anybody watches the online video lectures.
I would watch the video lectures prior to attending class, which allowed me to better focus on learning the key concepts during class time, as I had already been familiarized with the information via the video lectures.
It was helpful to see questions in class that directly reflected the material I reviewed from the video lectures. It was helpful for studying for exams and enabled me to better remember the information.
I was able to go back and listen to lectures multiple times to clarify a topic.
It was nice to have it to review time and time again
The videos were a great way to better understand the material before going to class
yes very much so it is useful for someone like me who doesn't learn well in a large class size
I definitely think seeing the information through multiple sources (video lecture, book, discussion questions) made me remember material better. It also made me better prepared for class and able to understand conversations in class and rationales for why an answer was correct and why a particular answer was not as good.
Being able to watch the videos at any point to review information is helpful.
the online lecture is a excellent way to get a overview of the chapter when I was lacking time to read the chapter.
The video lectures I really liked, but if I have to watch an hour per chapter, I would like it if the concepts were better explained and not just told to read the book. The in class discussions were not helpful because most people were not prepared, I would prefer for Professor Wang to just go over the answers in class.
The online video lectures helped give a very basic and general concept of the chapter which the in-class discussion would reinforce. Made reading the chapter later much easier.
Genetic pathways
I can constantly refer back to all of these available resources, so whenever I forget a concept it is very easy to review
It helped me retain information because I was seeing the video lectures then going to class the next day and reading the chapters as well. After seeing the information three times, it was much easier to remember and understand. It also helped me prioritize topics.
I found the in-class discussions to be very helpful. I especially enjoyed the incorporation of outside lectures (on genomics and population genetics) from experts in the field.
The in class discussions, especially, always used a question or two to develop the chapter into multiple different topics and effectively helped the class learn new material while answering multiple choice and open ended questions
Yes knowing what is going to be discussed before class is very helpful in familiarization of the material
The in class discussion problems really help me to apply and recall the information we covered in class. I did not find the videos as helpful because they didn't really cover the material in detail and were incredibly time consuming in addition to having to read the text book and completely the learning curves.
The video lectures helped me better understand the topics when we discussed in class.
Some of the questions on the in class discussions were re-used or elaborated on, on the test so I could remember the answer.
The online video lectures were extremely helpful because it helped reinforced concepts from the book and class, but if I needed to hear something repeated or to go over again, I could do that with the video. I could recall concepts that overlapped between the classroom, book and home.
I feel like some of the discussion questions are not representative of the materials we need to know for each chapter. We went through the material very fast. A Chapter per class is too much. I feel like the videos were helpful but it was very difficult to watch the videos before class. Most of the videos are watched after class or during the weekend. You are asking students to watch 45-60 min video lectures in addition to 75min lecture class, in addition to doing learning curve, in addition to studying. Your method of video lectures would probably work best if people are only taking your course with some other light courses. However, those who have 18 credits, have to work to support themselves, participate in some clubs at school, and try to have some sort of small fun, those people can not dedicate 1000 hours of work for just one course. Its not fair. The best option sadly for those people is learn the material on their own from the book, and try gain as much knowledge from the in class discussion. I Loved the twitter feedback, that was a cool feature of the course. I also loved the first couple of lectures. Going through the power point and having questions in the power point. I feel that is very effective in teaching the material and engaging the students. I did not appreciate the fact that we were the guinea pigs for this video lecture experiment, I apologize if I am too harsh, but that is my honest opinion. The most information I learnt was in the first lectures where you used presentations and had engaging questions. I hope people are honest in their opinions. You are a great teacher overall. But I felt like the class was very fast, and having to spend extra time to doing hw and studying for the class the lengthy video lectures were too much.
I feel that the in class discussions were more helpful than the video lectures because they used the information found within the video lectures to answer problems. However, this could not have been accomplished in the same amount of time without the video lectures, and so the video lectures also contributed positively to the improvement of my ability.
The 2 different ways of getting information (reading it & having it explained to me) helped me better understand the phenomena.
The dynamic of the class and the explanations of the professor made it really easy for me to remember and understand hard concepts
I found the in-class discussions to be very helpful and even wished that there was more on the board problem solving. However, I have a hard time learning from a video.

I would watch the video lectures before each class, which allowed me to really focus on understanding the important topics during class.

The videos made studying better because I was able to rewind and review sections of the material I needed when taking notes. They also helped when studying for tests.

The video lectures were not helpful because they took too much time outside of class while many students have other classes and don't have a few hours a week to spend on supplementary material.

The ability to go over practice problems in class was most helpful

Online video lectures are helpful b/c I can pause & rewind if I did not understand something. It is also sometimes easier to focus at home rather than in class if it has been a busy day and I am tired while in class.

In class discussions really helped and the video lectures introduced the material.






I can watch and pause video lectures at my convenience. Hearing others explain material also helps me learn as well.

The many different methods with which we learned really helped reinforce the material

The in-class discussions were great resources to prepare for the exams as they reflected the key concepts for the chapters.

Statistic	Value
Total Responses	46

3. Because of online video lectures and in-class discussions, my ability to describe or explain a genetics phenomenon or pathway has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		14	13%
2	Agree		39	35%
3	Neither Agree nor Disagree		27	25%
4	Disagree		19	17%
5	Strongly Disagree		11	10%
	Total		110	






Statistic	Value
Min Value	1
Max Value	5
Mean	2.76
Variance	1.39
Standard Deviation	1.18
Total Responses	110

4. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response	
The teacher explains the concepts more in depth than the book, which helps me learn the information. I can explain the genetics concept as a result.	
Being able to learn the information in two different ways made it much easier for me to be able to explain it to other people.	
I could re watch the lecture many times until I fully understood the material.	
I learned more than if i would have simply listened to a lecture alone	
During an in-class discussion, I am encouraged to participate because I can recall the answer to a specific problem and understand how I arrived at the answer; in other words, my thought-process.	
My understanding has been reflected in my ability to reason and explain my exam and quiz answers.	
able to watch and notate at my own pace	
During class, my peers and I would often explain complex ideas and processes to each other during the discussion. This was useful in mutple ways, as my peers' explanations would help me to understand things which were not quite clear to me, and through explaining to pics to my classmates, I became more comfortable with the information myself.	
I had a better understanding from the discussion, and it helped me to be able to explain.	
it gave me a very good basis to then test what I have learned with the class discussion	
Mainly thorough in class discussions, because talking forces you to verbalize your thoughts into more concrete notions.	
The in class discussion, even though i did not participate in many of them, was a plus is my learning. I was learning from my class mate and professor as they spoke.	
the questions provide applied learning that is easier to remember than normal lectures. However, I would have liked more in class lecturing mixed in with the discussion questions.	
Same as above	
Due to in class discussion I was forced to phrase the information in my own words which made me better at explaining it.	
Enhancer and repressor systems	
I find the my level of genetics knowledge is up to par with my friends currently in their second year of medical school. That's impressive, at least to them.	
Being able to write out mechanisms/pathways on the board and discuss them, as well as Dr. Wang giving examples in the video lectures really helped my ability to explain these pathways on my own because of how many times and different examples of them we discussed	
As stated above the lectures gain more meaning by actually doing problems that would be seen on tests and thus helping retention	
Similar to the above explanation. I found the in class discussion problems much more helpful than the videos.	
I now have a better understanding of basic principles of genetics.	
These methods force/allow students to do the work/readings beforehand, so when you get to class you're actually prepared and can contribute something to the conversation.	
I feel like some of the discussion questions are not representative of the materials we need to know for each chapter. We went through the material very fast. A Chapter per class is too much. I feel like the videos were helpful but it was very difficult to watch the videos before class. Most of the videos are watched after class or during the weekend. You are asking students to watch 45-60 min video lectures in addition to 75min lecture class, in addition to doing learning curve, in addition to studying. Your method of video lectures would probably work best if people are only taking your course with some other light courses. However, those who have 18 credits, have to work to support themselves, participate in some clubs at school, and try to have some sort of small fun, those people can not dedicate 1000 hours of work for just one course. Its not fair. The best option sadly for those people is learn the material on their own from the book, and try gain as much knowledge from the in class discussion. I Loved the twitter feedback, that was a cool feature of the course. I also loved the first couple of lectures. Going through the power point and having questions in the power point. I feel that is very effective in teaching the material and engaging the students. I did not appreciate the fact that we were the guinea pigs for this video lecture experiment, I apologize if I am too harsh, but that is my honest opinion. The most information I learnt was in the first lectures where you used presentations and had engaging questions. I hope people are honest in their opinions. You are a great teacher overall. But I felt like the class was very fast, and having to spend extra time to doing hw and studying for the class the lengthy video lectures were too much.	
The 2 different ways of getting information (reading it & having it explained to me) helped me better understand the phenomena.	
It is easier to understand the concepts.	
I was able to not only memorize the material but also understand it	
When studying the more detailed and complex pathways on my own, it was often difficult to understand by just reading the textbook. But the in class discussions made me more able to explain key processes by being able to discuss them with my peers.	
The in-class discussions would be more helpful if we got through more information during a class period and did not rely on so much student participation, much of which just confuses people more.	
visuals in the powerpoints were helpful in describing pathways	
I can watch and pause video lectures at my convenience. Hearing others explain material also helps me learn as well.	
Similar to the above statement. You provided us with many methods in which we could apply our information, and thereby conceptualize genetics.	
Because the video lectures and in-class discussion outlined the major topics, it was a good reference point to then read the material in detail in the book, and this helped me to better explain a genetics concept.	

Statistic	Value
Total Responses	32

5. Because of online video lectures and in-class discussions, my ability to predict an outcome using several pieces of information or concepts has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		8	7%
2	Agree		40	36%
3	Neither Agree nor Disagree		32	29%
4	Disagree		21	19%
5	Strongly Disagree		9	8%
	Total		110	






Statistic	Value
Min Value	1
Max Value	5
Mean	2.85
Variance	1.16
Standard Deviation	1.08
Total Responses	110

6. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
I can put the facts and info all together to see how it all comes into play because the online video lectures go into detail which is more engaging and easier for me to follow.
My understanding has been reflected in my ability to reason and explain my exam and quiz answers.
clarification provided on how a conclusion was reached
I was able to better understand all of the information and related old information to new information we learned.
I felt better prepared for the class discussions after having watched the videos
when I didn't understand something in the online video lectures it was always clarified by the class discussions
I feel it helped me learn better so yes that would help with synthesizing information together from multiple concepts.
My prediction analysis has improved, but need to get better. I will work on that as I will be studying for the MCAT.
The in-class discussions taught me to pay more attention to the details of the question.
Talking through topics during in-class discussions really helped my critical thinking skills develop.
Same as above
The in class discussion questions were very helpful and getting a good understanding of the material and how to apply it. Unfortunately, a lot of the questions had multiple answers that applied to the corresponding questions and this in turn really confused me on the exams when you only wanted "The Best Answer." Therefore, I think to make the discussion questions more beneficial, you need to either only provide one correct answer in the in class discussion problems or make the exam question's answer choices more different from the in class question's answer choices to avoid confusion.
I feel like some of the discussion questions are not representative of the materials we need to know for each chapter. We went through the material very fast. A Chapter per class is too much. I feel like the videos were helpful but it was very difficult to watch the videos before class. Most of the videos are watched after class or during the weekend. You are asking students to watch 45-60 min video lectures in addition to 75min lecture class, in addition to doing learning curve, in addition to studying. Your method of video lectures would probably work best if people are only taking your course with some other light courses. However, those who have 18 credits, have to work to support themselves, participate in some clubs at school, and try to have some sort of small fun, those people can not dedicate 1000 hours of work for just one course. Its not fair. The best option sadly for those people is learn the material on their own from the book, and try gain as much knowledge from the in class discussion. I Loved the twitter feedback, that was a cool feature of the course. I also loved the first couple of lectures. Going through the power point and having questions in the power point. I feel that is very effective in teaching the material and engaging the students. I did not appreciate the fact that we were the guinea pigs for this video lecture experiment, I apologize if I am too harsh, but that is my honest opinion. The most information I learnt was in the first lectures where you used presentations and had engaging questions. I hope people are honest in their opinions. You are a great teacher overall. But I felt like the class was very fast, and having to spend extra time to doing hw and studying for the class the lengthy video lectures were too much.
The 2 different ways of getting information (reading it & having it explained to me) helped me better understand the phenomena.
Case studies have helped me understand some concepts.
My process of thinking became much more analytical
The in-class discussion was more rewarding than the video lectures because it provided us with examples and answers.
The video lectures and class discussion guided me as to what to focus on for studying for tests and quizzes.
Practice problems helped when it came time to study
Helped with solving problems, more so than presenting certain topics that are more memory based
It really helps to go through complicated, multi-step problems in class, such as when we did in class discussions on Chi Squared tests and discussed gene flow concepts.
I can watch and pause video lectures at my convenience. Hearing others explain material also helps me learn as well.
They say the best way to learn a language is to immerse yourself in it, preferably by traveling to a country that speaks it. Genetics soon became a ritual part of my day due to the many ways in which I could interact with it.

Statistic	Value
Total Responses	23

7. Because of online video lectures and in-class discussions, my ability to to infer; understand how components relate to each other and to the process as a whole, and compare and contrast information has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		8	8%
2	Agree		31	31%
3	Neither Agree nor Disagree		32	32%
4	Disagree		21	21%
5	Strongly Disagree		8	8%
	Total		100	






Statistic	Value
Min Value	1
Max Value	5
Mean	2.90
Variance	1.16
Standard Deviation	1.08
Total Responses	100

8. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
I can see the similarities and differences between topics that may be harder to distinguish and I start to think ahead as to how this phenomenon differs from another. (homolog, analog)
The class content went together well
The in-class problem solving discussions offered a more critical approach to the information, and more effectively allowed me to think critically, then just passive note-taking and lecturing.
We would constantly relate old information to new.
Again, is a benefit to have the breakdown done by the professor. He leads us on the direction we need to scope in order to enhance our learning.
the problems done slowly as part of the lecture at the beginning of the semester helped more but in all they still helped.
Again, the discussions definitely helped with my abilities to digest information.
The questions helped me to take information I learned while reading and relate it to other information to answer application questions.
being able to go back thru the lecture via video or class notes, allows me to "fill in the pieces" of understanding.
The flipped classroom helped me synthesize concepts better.
Once I truly understood it was easy to connect everything together

Statistic	Value
Total Responses	11

9. Because of online video lectures and in-class discussions, my ability to synthesize a novel response and develop a hypothesis has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		6	6%
2	Agree		23	23%
3	Neither Agree nor Disagree		39	39%
4	Disagree		24	24%
5	Strongly Disagree		8	8%
	Total		100	

Statistic	Value
Min Value	1
Max Value	5
Mean	3.05
Variance	1.04
Standard Deviation	1.02
Total Responses	100

10. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response

For example, I am now determined to find out exactly how intercalating agents are able to act as base analogs in DNA. Do they form hydrogen bonds with the single strands of the double helix or are they able to interact with the DNA nucleotides via weak Van der Waals interactions?

Participation in the in-class discussions made me able to think independently about the information, and allowed me to generate my own responses to the questions and ideas.

The videos helped me develop higher reasoning for the class

Once again, the discussions helped with my abilities to digest information and work through it to get a response.

the questions not the videos.






My long term understanding allow this to be easier

The problem solving discussions that we did in class helped to develop my ability to think critically about topics, rather than just memorizing raw information.

Applying information builds our ability to think. It is often neglected, but I think above all the information we learn (and which we tend to forget a large segment of five or ten years down the road) our mind that we carry day in and day out transforms who we are, and who we become.

Statistic	Value
Total Responses	8

11. Because of online video lectures and in-class discussions, my ability to determine and critique the merit and the relative value of an argument or an experiment has improved.






#	Answer	Bar	Response	%
1	Strongly Agree		7	7%
2	Agree		23	23%
3	Neither Agree nor Disagree		36	36%
4	Disagree		25	25%
5	Strongly Disagree		9	9%
	Total		100	

Statistic	Value
Min Value	1
Max Value	5
Mean	3.06
Variance	1.13
Standard Deviation	1.06
Total Responses	100

12. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response	
<p>When my fellow classmates answered questions during the in-class discussion, I was able to utilize my own understanding of the topic to assess their responses and generate either my own, opposing argument, or a verification of theirs.</p>	
<p>In order to have a discussion you need to be able to critique the merit of someone else's argument. This allowed me to better determine which answer was the best answer</p>	
<p>We didn't really go over experiments where their arguments were in question. The Milk Case Study was very helpful in dissecting an experiment though!</p>	
<p>Since I understood the concept I was able to provide my own personal opinion</p>	
<p>As some of my fellow peers would answer questions in class, I was able to take their opinions and thoughts and use my knowledge of the topic to develop my own ideas.</p>	
<p>I was grateful to not only be able to engage in the information but also visualize how it related to our world. We scientists are the curious kind. And I think that learning about new discoveries via genetics portal and twitter really helped satiate our thirst.</p>	
Statistic	Value
Total Responses	6

13. Because of online video lectures and in-class discussions, my ability to communicate and collaborate with my peers to solve problems has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		7	7%
2	Agree		40	42%
3	Neither Agree nor Disagree		25	26%
4	Disagree		15	16%
5	Strongly Disagree		9	9%
	Total		96	






Statistic	Value
Min Value	1
Max Value	5
Mean	2.78
Variance	1.20
Standard Deviation	1.10
Total Responses	96

14. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
We talk a lot more in class and ask questions.
I enjoyed explaining concepts to my desk neighbors
The milk case study.
I was encouraged to attend a group study session and both receive help reviewing the key concepts of the chapters, and offer my knowledge to my peers.
I had a better understanding, and it was good being able to hear my peers opinions.
I was able to talk to my classmates about the topics because of the videos
The in-class discussion questions allowed my group to exchange concepts and answers with one another which then allowed others to either agree or refute the discussion.
work in groups to answer questions
Working together with classmates and getting different opinions from everyone was very helpful and collaborating with peers to get problems solved by different methods
The questions helped to work with my peers. Even if we did not finish covering the material in class, my study group and I often met up to review the questions and compare our answers and explanations.
The video lectures have helped my peers and I better communicate about the topics covered in class.
Watching the online video lectures gave me a slight understanding of the chapter before going to class. However, since the video lectures were so long and I had a lot of work to do for my other classes, I found it unfair that the professor expected us to watch them every time.
I'm a shy person
In class discussions were helpful when we broke up into groups and discussed with our peers.
In class discussion demanded collaboration with others
In-class discussions were very helpful in this.
I like that we are encouraged to talk amongst groups in class. There are many lecture classes where I will sit near the same people and never learn their names, but in this class I've connected with more peers while trying to answer questions.
Dr. Wang encouraged constantly encouraged collaboration in and out of class.

Statistic	Value
Total Responses	18

15. Because of online video lectures and in-class discussions, I learn at the rate which the classroom was going rather than letting it slide and cramming at the last moment.

#	Answer	Bar	Response	%
1	Strongly Agree		14	15%
2	Agree		30	31%
3	Neither Agree nor Disagree		14	15%
4	Disagree		22	23%
5	Strongly Disagree		16	17%
	Total		96	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.96
Variance	1.81
Standard Deviation	1.34
Total Responses	96

16. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response

The lectures are convenient if I don't have time to read the chapter before the next class.

The videos were helpful in staying on top of material

This is not easily prevented

The in-class discussions really helped motivate me to stay on track with the information, and look over the material or watch the video lectures ahead of time, so that I could effectively participate in class. It is a lot easier to get behind, and wait until right before the tests to cram information when all that is expected of you in class is to show up and listen to a lecture for an hour.

More of it stayed in my head versus hearing a lecture and having to go over it completely.

In order to participate in the in class discussions, I had to read the chapters beforehand.

Videos helped me stay on track

much easier to stay on topic, we knew exactly where we were each lecture

this is more due to the pop quizzes but the questions help also

It made it even harder to keep up with the pace of the class because we did not have look at the chapter, and would leave them to the end. If professor Wang goes over all the topics in class, we would be able to learn better.

This was more due to the pop quizzes than anything. They forced me to come to class and know things.

Often times I found I didn't have the time in the day between work, other challenging classes, exercise, etc. to keep up with the video lectures and chapter readings, thus, on occasion I found myself cramming. Too much information, too little time in the day

Having the video lectures especially, forces you to keep up with the material and be prepared going into each class

The video lectures were very long and didn't go into enough depth on the material as to where it could supplement reading the text book. Therefore, I was often behind on my readings and was constantly trying to play catch up. If the videos gave more definitions, and explanations so the text could be used as a reference for concepts that were extra difficult, even if that meant the videos were a little longer, then the videos would help me learn at the rate the classroom was going.

I found myself falling behind because I did not have time to watch an hour of video lectures on top of my other work and classes before each Tuesday and Thursday class.

i agree because it forces you to do the work at a certain pace, but at the same time there is so much material, and it is difficult to do so much work in 2 days. the videos can be a good primer for class instead of reading through only half the chapter.

It encouraged me to keep up with the reading

Having the quizzes helped this the most.

I learned when it was convenient for me and I had time to watch the videos. I wasn't always before class time before some of the videos were provided the night before lecture. I would be helpful to provide the videos a couple of days in advance.

Always tried to have the text book reading for the topic discussed in class completed before coming to class






While that was the goal and I would have liked to adhere to it, it required a lot of time to participate in all these activities while still spending time on my other classes.

I feel that the in-class discussions are very helpful, because we are both held accountable for the knowledge and get to discuss any concepts we might have missed or not understood as well. Honestly, the video lectures did the opposite for me. I hardly ever watched them because I didn't feel I had time to spend on something that would be gone over in class, especially since they were usually just watered down versions of the book or lecture. Some of the shorter ones were better for reviewing for exams because they helped me know which concepts were vital, but it was definitely way too much to keep up with the videos week to week. In short, in-class discussions were great but I didn't think the videos were that effective.

Time management was an important component of this course. Some adapt better than others. Certainly this was a great way to motivate those to move in that direction though.

Statistic	Value
Total Responses	23

17. Because of online video lectures and in-class discussion, I had more interactions with the instructor and prepared better before class, had more class attendance, and became more active in class activities.






#	Answer	Bar	Response	%
1	Strongly Agree		13	14%
2	Agree		33	35%
3	Neither Agree nor Disagree		20	21%
4	Disagree		17	18%
5	Strongly Disagree		12	13%
	Total		95	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.81
Variance	1.56
Standard Deviation	1.25
Total Responses	95

18. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response	
I may have been more active in class than I normally would be, but I still would prefer traditional lecture methods. I learn by listening and taking notes on lectures and being able to ask a question as soon as the question arises.	
The in-class discussions always made me think about the material and generate questions for the instructor, and made me feel more comfortable to ask for clarification when necessary. I also was more motivated to participate and come to class well-prepared. My attendance was not particularly affected, as I generally attend class anyway, but it made class time more worthwhile.	
I would have attended class regardless of whether or not these tools were used.	
I was better prepared for class but it may have reduced the amount of participation in class, because my questions were produced watching the video lectures rather than during lecture.	
I liked Dr. Wang's use of interaction with the entire class. It made you want to know the material beforehand so that you can answer the questions correctly. In addition, the quizzes forced us to keep up with the material as the course went on.	
knowing discussion questions helped on exams	
Same as above	
It's awkward to be unprepared for a discussion so I was more likely to be prepared for this class in case Professor Wang called on me	
Knowing there may be a quiz and that there was always an in class discussion caused me to become more involved and better prepare for class	
I did really like that the questions helped to make the class more interactive. Most of my large lecture classes are never interactive. The interactive classroom definitely helps me learn, but as previously stated, with such huge time requirements between watching the videos, reading the text, and my other responsibilities it was hard for me to keep up with the material and therefore could not interact myself as much as I would have liked to.	
I did go to class more often hoping that I would get a better grasp on the concepts which I did not understand from the video lectures.	
I felt like the in-class discussions provided valuable information, almost like a review for the exam. In-class quizzes also increased incentive to go to class, also interactions with the instructor.	
I was encouraged to attend class	
Never seen a professor know so many students names in such a large lecture	
In class discussions were good because I knew if I tried to answer at least one question per class, I could get participation points. It also helped to know that we would be doing something in class where we actively participated. I knew I could see these questions or questions like it on the test, so there was a practical aspect as well.	
I would definitely imagine so. However personally my semester was a sort of wreck. Dr. Wang's positive energy and fascination of the field was certainly contagious.	
Statistic	Value
Total Responses	16

19. The use of twitter to share articles has clarified common science misconceptions for me.






#	Answer	Bar	Response	%
1	Strongly Agree		6	6%
2	Agree		10	10%
3	Neither Agree nor Disagree		47	49%
4	Disagree		24	25%
5	Strongly Disagree		9	9%
	Total		96	

Statistic	Value
Min Value	1
Max Value	5
Mean	3.21
Variance	0.95
Standard Deviation	0.97
Total Responses	96

20. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response	
I dont have twitter	
I never looked at the Twitter and the articles did not pertain to the class anyway	
Twitter use is okay does not really help as much as video lecture with in class problem solving	
I don't use twitter nor do I have time to use another social media source.	
It was interesting to see what people posted.	
I'm not very good with twitter and online websites. I don't even have a facebook page, but thats my personal way of thinking	
Unfortunately I do not use twitter often. However the times I did and checked, it was exciting.	
Statistic	Value
Total Responses	7

21. The use of twitter to explore science articles has inspired me to read more about scientific research.

#	Answer	Bar	Response	%
1	Strongly Agree		11	11%
2	Agree		27	28%
3	Neither Agree nor Disagree		29	30%
4	Disagree		20	21%
5	Strongly Disagree		9	9%
	Total		96	






Statistic	Value
Min Value	1
Max Value	5
Mean	2.89
Variance	1.32
Standard Deviation	1.15
Total Responses	96

22. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
I can look at more sources/research that is shared through Twitter.
I don't use Twitter much!
It was always interesting to read the posted articles, and was helpful to have the sources and articles so conveniently available to read.
The articles on Twitter were very interesting
Same as above
I've been playing on twitter on my phone and then clicked on some links provided by Dr. Wang and read the article which would otherwise not have happened.
I use reddit a lot and a lot of those science articles are posted there so for this is a moot point
I don't use twitter nor do I have time to use another social media source.
I did occasionally read an article that was posted if it seemed interesting.
Articles are interesting
Not necessarily twitter. But learning about genetics and the processes which make me, me encourage me.

Statistic	Value
Total Responses	11

23. Because of the use of twitter, my ability to use digital or online tools to communicate or disseminate information relevant to a particular audience has improved.

#	Answer	Bar	Response	%
1	Strongly Agree		7	7%
2	Agree		21	22%
3	Neither Agree nor Disagree		33	35%
4	Disagree		24	25%
5	Strongly Disagree		10	11%
	Total		95	






Statistic	Value
Min Value	1
Max Value	5
Mean	3.09
Variance	1.19
Standard Deviation	1.09
Total Responses	95

24. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
I knew how to use technology before this class, I never use twitter
I don't use twitter nor do I have time to use another social media source.
As above

Statistic	Value
Total Responses	3

25. The use of twitter in this class has increased my interest in science.

#	Answer	Bar	Response	%
1	Strongly Agree		5	5%
2	Agree		16	17%
3	Neither Agree nor Disagree		34	36%
4	Disagree		24	26%
5	Strongly Disagree		15	16%
	Total		94	






Statistic	Value
Min Value	1
Max Value	5
Mean	3.30
Variance	1.20
Standard Deviation	1.10
Total Responses	94

26. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
Never used the twitter, it was annoying, I liked science before this class
Not perhaps in class but the use in general. Im going to scroll through twitter and since befriending professor wang interesting science articles pop up. This access to interesting up to date relevant information has increased my interest in science.
I don't use twitter nor do I have time to use another social media source.
Sharing the articles of recent research.
As above

Statistic	Value
Total Responses	5

27. The use of twitter in this class has increased my class participation.

#	Answer	Bar	Response	%
1	Strongly Agree		8	8%
2	Agree		35	36%
3	Neither Agree nor Disagree		27	28%
4	Disagree		15	16%
5	Strongly Disagree		11	11%
	Total		96	

Statistic	Value
Min Value	1
Max Value	5
Mean	2.85
Variance	1.30
Standard Deviation	1.14
Total Responses	96

28. If Agree or Strongly Agree, please provide a brief explanation or example:

Text Response
I emailed most of my responses
I was more prone to pay attention in class so I could do the twitter excercises.
great way to get class participation
I was able to give answers through twitter despite being in such a large class.
Forced me to participate in class
The extra time I have to take to to tweet things in class, I lose hearing the actual responses.
Answering questions via twitter caused you to always be paying attention and remain active.
I do not participate using twitter, but I do via email. Responding with my answers and questions from in class discussion questions help to keep me focused and active in class.
I always tried to send in my answers via twitter.
because i had to. i did not have a twitter before this class and i only use it for this class.
I am usually nervous and do not like to raise my hand in front of an entire large lecture to answer questions, so the use of twitter allowed me to express my answers and opinions in a way that i felt comfortable
Sometimes I was so busy trying to tweet my answers I would miss out on the class discussion of them and kept trying to catch up and tweet and write them down.
I do not like to answer questions in class due to fear of public speaking so this was a good way to still participate.
Diversifying how an interaction occurs encourages participation.

Statistic	Value
Total Responses	14