Professors: The Good, The Bad, and the Senile

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Introduction

I, like many Americans, have experienced in some form or another university like education or what is referred to as, "higher education". My current three years in undergrad have taught me that higher education is in many ways not all that different from other forms of education. One of the many traits that it shares with other forms of education, is that the instructor literally makes or breaks a class in terms of how much a student can get out of it. In this paper I intend to break down what are the traits in professors, that I personally find make a Professor good, bad, or, just straight senile.

1 Lectures

Lectures function in a course as the time when a professional in the field is giving you their personal understanding of the subject, to you directly. For that reason lectures are one of the single most important parts of a course that if done poorly, can ruin the entire course. There are two ways in which a professor can take away from their lecture. The first is in how one lectures and the second is how much time they waste. Since lectures are so important, any time an instructor wastes in a lecture is a waste of your time and money.

1.1 Word Vomit

Word vomit and filler words are a problem most people have, not just academia. Although I have a preference to never hear their use in any conversation, it is especially crucial for professors to avoid the use of such terms, or phrases, during a lecture. The words of a professor is literal information for students to absorb in order to have a better understanding of the course material. Depending on the rate of the use of word vomit, students will stop listening. In a perfect world, students would not change how active a listener they are depending on how often the word "um" comes from their professors mouth. The truth is that the less substance you have in your sentence, the less likely someone will place an effort in decoding filler from the real meaning of your sentence.

The most common term professors use to clutter their sentences is undoubtedly the word, "right". Take a day to make a tally of every time your professor places a well timed "right" at the end of their sentence in a lecture, my personal high score as of now is ninety seven. For all the professors out there who do not know how to use the word "right", allow me to educate you. When you state what you believe to be a piece of information that the rest of your audience would know, but become unsure if that is the case midway in stating it, you utilize "right" at the end of your sentence. Students that would like to discriminate between when an instructor is using the word to take up space, and when they truly mean it, take a look at where they are looking when they utter it. If your professor is not looking at the audience, for instance a book, PowerPoint, or white board, they are not looking for a reaction to their question. Therefore, confirming their reliance on the word to just take up time or to sound professor like.

The bottom line is, when anyone lectures, the more time you waste with words that do not explain what you mean, the more time someone is wasting by listening to you.

1.2 Audience Involvement

Unlike word vomit, audience involvement is something that I cannot even begin to guess where it originated from. Audience involvement also changes depending on the field we are talking about; STEM, Humanities, Social Sciences, and so on. When I refer to audience involvement, I am looking at when a teacher looks to the audience and expects a response. It is important to note that this tool in teaching, like many things I will discuss in this paper, can be a great addition to a class or a hindrance. In this case I will be pointing out when it is used poorly.

The worst situation is at the STEM based classes. In most cases in STEM courses, this is done when a professor demonstrating a problem or testing students. Professors showcasing how solving example problems related to a topic is as important, as it is frequent. It is only an issue when the instructor calls to the audience to help them through the solution. In addition, the use of spur of the moment questions to see if the audience is paying attention, is an absolute waste of time. Normally students do not feel comfortable calling attention to themselves, so in many circumstances no one responds. Students can quiz themselves on memory and practice problems in their own time. This is an example of wasting precious lecture time with something a student can do by themselves. Do not underestimate how much time it takes away from a class. Every question a professor asks that is met with silence, will add up and take the overall attention of students away from what is happening in the lecture.

As for the Social Sciences, the use of audience involvement has a higher chance of positive contributions to the class, but the same issue with STEM can happen in these courses. If the instructor just wants a student to give info to the class, as opposed to doing it themselves, there will always be a problem. On the on other hand, the Social Sciences can benefit in proving points by using classes

as a sample for statistics. For example, if a sociology professor in a mandatory freshmen course wants to showcase the differences found in employment between gender. It may be a great idea to use the class by asking students in the course to raise their hands based on desired employment, then dividing the room by gender identity, and then looking for patterns. This helps show a concept with audience involvement that does not take away from a lecture and, in fact, adds to it.

Unlike the STEM courses Social Sciences can fall into the trap of trying to make conversations and discussions with students. It is really important to note that discussion is one of the best parts of academia and should not be thrown away, but that is not the same as using up lecture time for discussion. Courses that benefit from discussion should have distinct discussion times with TA's. The real meat of what makes discussion useful is between peers, not with professors. If a course is missing one, and arguably could use one, then the solution is to have a discussion session instead of taking up valuable lecture time with a teacher. Professors that spend their lecture time listening to the opinion of students, is a waste of time. Every individual in that class did not spend multiple thousands of dollars to hear themselves speak, this can be done in our own time, we came to listen to someone who knows what they are doing.

1.3 The use of Visual Aid

Almost every lecture uses some form of visual aid whether it is a Power Point, picture set, video, model, or an old fashioned chalkboard. It is important to note that visual aids are immensely helpful in getting complicated and intricate subjects across. But, like most things, there exists a poor way to use it. The first way to use a visual aid incorrectly, is to use it as a replacement for an actual lecture. This sounds obvious and seems rare, but only one of those assumptions is correct. Even in university education, the amount of courses that will use an entire lecture period to play a video is alarmingly large. Playing a video is an example of an activity that can be done on your own, that is being used to replace actual lecture time with an instructor. That is not to say videos are not useful in any setting of learning, they are just best used in lecture when they are short, and should be assigned as work outside of class when they consume a lengthy stretch of time. The subject of the video can then be discussed, or analyzed, in class if a professor chooses to do so.

In the hierarchy of horrible visual aid uses, videos replacing a lecture is most certainly at the top. Second to that, would be the use of power points as scripts for a lecture. That issue exists in both the corporate world and academia, and it stems from an individual not knowing what they are talking about? If an individual is knowledgeable and comfortable in the topic of a conversation, or in this case a lecture, they could discuss the topic without a script, and they would prefer in most cases to not have one. So when a professor reads off a power point, it does not just look like they are unfamiliar with the topic at hand, it most likely is the case.

A professor who is knowledgeable and experienced can lecture on a subject

with nothing, but a blank chalkboard and a piece of chalk. Ideal professors already know which important key terms, or visuals, are significant to the related topic. They are familiar with the subject material either because they spent years tackling it themselves or, form recent training to familiarize old material. They can produce visuals with their chalkboard in real-time during the lecture, instead of relying on a pre-made visual aid ahead of time. There's is nothing wrong with preparing a PowerPoint for a lecture(in fact, it is almost always a good idea) the important part is that the professor is using it to better their ability, not to replace it.

2 Questions

How an instructor answers questions, is a really good method of finding out the quality of a professor. A good question typically facilitates an answer that displays a professor's knowledge of the topic being discussed, rather than an answer they have practiced giving. That is because the student is seeking more information from the professor, data that has yet to be, or wont be, presented. Now they are not repeating info that can be memorized instead they are listening to something new and thinking with years of knowledge that a student does not have to formulate a response. Therefore, to give a good answer to a question the most important prerequisite is to have a strong level of understanding of the discipline the question is based in.

2.1 It is okay, to say, "I don't know"

There are three possible routes an instructor can precede with when they can not answer a question. Route one is, give a response that does not answer the question. The second, give a blatantly false answer to the question. Lastly, admit to the reality that you do not know the answer. I have found the overwhelmingly more common choice professors make is to not answer the question, that being as appalling as it is, the most heinous of the options is to knowingly give false information. The only remaining choice out of the three is to admit to not knowing the answer.

The few times that a professor responded to a question from either myself or a classmate with , "I don't know", I have felt nothing but admiration and respect. I personally hold honesty to be the most important trait in individuals, especially one with authority, like a professor or teacher. I am not the only student that has such high admiration for those words. A professor who does not hold a certain standard of knowledge for their subject is one of the worst instructors to be stuck with but, professors are not built with update-able hard drives. No matter how knowledgeable a teacher is, there will eventually be a question they will not have an answer for. When this happens, there is a choice to be made, be honest or be something worse.

I have only encountered one professor who was truly astonishing. When she found herself with a question she could not answer, She said, "I don't know"

followed by, “but I will find out and let you know next time”. She proceeded to make a note, and delivered on her promise for the next lecture. I was bewildered to a degree I had yet to experience in university life. This answer is an example of how a spectacular professor interacts with her students. She remains honest throughout her time with us, and when she came to a spot where she could not give an answer. She, on her own accord, obtained the information she was lacking and informed us right away. In contrast, with a professor that does not even answer the question, it makes me want to get up and leave every time I hear an instructor chose to avoid answering a question.

2.2 Lack of Active listening

It is sad to admit, but most of my peers are not successful at wording their questions to say what they mean. However, it is still very doable to listen to a student, and quickly determine where a student is misunderstandings the material. Students often become puzzled or adopt the wrong understanding of material for similar reasons. I can normally deduce what those common hurdles are, either from knowing the material itself, or from listening to the questions asked by my peers. We can view both understanding the material and active listening as prerequisites to being able to answer a question properly. Both are very much possible to obtain by professors(and should), but many fail to procure the last one. The difference in professors who actively listen to their students, and those who do not, is monumental.

Here is an example of a personal experience with a professor that did not actively listen. The course was a CS course that was looking at data structures. Do not panic if you are unfamiliar with this topic, it is the interaction that is important, not the subject matter. For the entire course until this point we had been looking at one type of data structure, referred to as a linear data structure. Binary trees were the first topic that was fundamentally different from the pattern the class had took until that point. The professor had just explained what binary trees(the new data structure) were, and was now displaying code that actually implemented the theory he was just discussing. A student raised their hand and asked, “How do know which child node, left or right, to use first”? Again, the content of this question is not really important, what is important, is how the professor responded. In response to this question, the instructor pointed to the board, and restated what each line was doing in the exact same words that he used before. There are two major problems here. First, is he did not actually answer the students question. The student asked how the professor knew something, which should be answered with a thought process of why that choice was made. Instead, the professor responded by explaining what the code on the board does. Just from listening to the question, you can assume the student thinks they know what the code is doing, they do not understand why it was done. Second, the professor did not find the clear origin of the problem the student had. Which was, they were still thinking in terms of the category of data structures that the class was no longer discussing. The student was still thinking from the perspective of the previous topic, instead of the one currently

being taught. As an instructor in this course, it should have been relatively simple to find this if they were actively listening. After Considering the change of topic and what the student had asked, the instructor should have deduced why the student was having trouble, and then confront the issue. Instead the teacher repeated the previous two minutes of lecture. Either the instructor is unfamiliar with the topic and cannot actually understand what the student was saying(and that student was quite clear), or they simply did not actively listen to what their student said. I would bet on the latter, and not the former.

2.3 Not Answering the Question

The most common thing I see in academia when a professor is asked a question that does not go along the lines of, "how do I do this" or, "why was this wrong", is an intentional decision to avoid the question. This avoidance is usually done by repeating the last few explanations, or words, given in the lecture. In fact, professors love doing this trick so much, they will even add it on to their actual answer of a question. At one point in my undergrad career, a course I took was mentioning climate change. In that lecture, I started realizing that the professor was using numerous graphs to represent phenomena, but had no idea where they came form. I started questioning how much she really knew about the facts she was talking about, and I took a blind swing on something I was genuinely curious about that I saw on her PowerPoint. The bullet on the PowerPoint was, "It has been estimated that black carbon is responsible for a quarter of observed global warming". There are many questions that can be asked about this fact. What is the difference between observed and actual global warming? Who made the estimation? how does percent work in this case? But, I went with the basic question, "How do we estimate such a piece of information"? The answer I was given started out decently with an, "I don't know", and then continued with another five minutes of explaining what black carbon was. This information was already explained to us on the previous slide. In short, the professor reiterated information that was stated not even two minutes ago, in answering a question that should have only consisted of, I don't know" My guess is the professor was not comfortable saying she did not know how it worked, and, therefore, inserted unnecessary and redundant information in order to give her response more substance.

Repeating information is not the only fun thing that teachers use to not answer questions; they also answer a different question. Similar to the use of a straw man in an argument, instructors will responded to questions they cannot answer by answering a similar question. It sounds like a ludicrous idea because, one would imagine the person who asked the question would bring up the fact that their question was not answered. Unfortunately, not the case but, this is the issue at the fault of those who are straw maned. When this happens, it should be very easy to mention that your question was not answered. It might be wrong for professors to respond to question like this, but students are equally responsible for not standing up when they have been metaphorically slapped in the face.

3 What to do about it

I think the answer to this problem is a simple one. Students need to talk about it. That is the reason why this paper even exists. My goal is to have a real and coherent, explanation for what I think is right, and wrong in teaching, so that others have something to point to. With this base established, people can agree or disagree, but now we will actually have a conversation going on the subject, from the perspective of students. Hopefully this will make for a change in the future of academia, for the better.