From: "Fleming, Kimberly" < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

Date: August 27, 2020 at 11:31:25 AM EDT

To: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Hi Ben. Sorry for the late reply. I was on vacation and only just now had some time to really read and review your work.

I understand your confusion and frustration in regards to the structure of your Introduction. My outline I provided you with is really just a suggestion to get started and the structure of your Introduction does not have to follow my guidelines exactly. Some studies such as yours doesn't work well with my guidelines since your not really testing a clear independent/dependent variable relationship in the traditional sense. I think you are far along enough that you and your mentor can discuss and reorganize the flow of your Introduction as best as you both see fit. I am totally find with that.

Some of my comments below might seem to contradict my outline proposal- just organize how you think it flows best.

- 1) Your last paragraph is more general than the beginning, making me think maybe you can move it toward the beginning of your Introduction? Generally speaking, your introduction should flow from more general ideas/background info into much more specific details.
- 2) Your first paragraph currently doesn't flow well between the 1st and 2nd sentence. I feel that you need a better transition to introduce ENSO in more detail
- 3) I'm confused a bit by your second paragraph. You start by stating that previous research has been inconclusive but unless I'm misunderstanding, the citations you discuss don't seem inconclusive? Maybe you can clarify this?
- 4) Your last paragraph should include the hypothesis, or in your case, probably the goals of the experiment. Add that in.

Overall I think this is a great start. I've included some resources I just received this week that might help you understand better how to structure your paper. Feel free to use them as you see fit. One example that is included is how some students are using sub-headings to clarify what topic is covered in that section of the Introduction. You may want to consider doing that. Remember that this will be a work in progress that you will be working on all year. It doesn't need to be perfect yet!

Let me know if I can do anything else to help.

Kimberly Fleming Science Research Teacher White Plains High School 550 North Street White Plains, NY 10605 (914) 422-2305 Classroom G114

From: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Sent: Monday, August 17, 2020 2:43 PM

To: Fleming, Kimberly <a href="mailto:kimberlyfleming@wpcsd.k12.ny.us">kimberlyfleming@wpcsd.k12.ny.us</a>

Subject: Re: Just checking in

Hi Ms. Fleming,

I have a question on the introduction assignment. Attached is a draft of my introduction. I am using the template for the journal my mentor mentioned. (It automatically says submitted at the top, but I have not submitted it.)

I am having a little bit of trouble with steps/paragraphs 3 and 4 in the assignment (which are pgfs 4,5 in my draft). I'm not quite sure how to introduce the independent variable, as what I have there seems somewhat redundant. Most journal articles on ENSO are very brief on the definition of global warming. And for the dependent variable, I don't really know what to say, as my dependent variable is the 20-year running variance of the Nino 3.4 region of the Pacific Ocean, which is the main way to measure ENSO intensity. But that feels like it should really go in Methods, and the concept of changes to ENSO intensity is discussed in the paragraphs before it. How do you think I should use paragraphs 4 and 5? Do you think that the other intro paragraphs are fine, or is there anything I should fix?

Thank you!

On Aug 5, 2020, at 12:42 PM, Fleming, Kimberly <a href="mailto:kimberlyfleming@wpcsd.k12.ny.us">kimberlyfleming@wpcsd.k12.ny.us</a> wrote:

Great news! Thanks for the update.

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From: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Sent: Wednesday, August 5, 2020 12:08:37 PM

To: Fleming, Kimberly < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

Hi Ms. Fleming,

So sorry I haven't contacted you in a while! My research is going well. I have moved on to looking at ocean cross section datasets to determine what factors are affecting ENSO amplitude. I'm pretty proud of the figures I've produced. My mentor is having a colleague of his, Peter Gent, look at our data and help us to

analyze it. We are beginning to talk about submitting to a journal, probably Geophysical Research Letters, which I am very excited about. I have a feeling this project will be completed before the end of junior year.

Sincerely, Ben

On Jul 13, 2020, at 2:14 PM, Fleming, Kimberly <a href="mailto:kimberlyfleming@wpcsd.k12.ny.us">kimberlyfleming@wpcsd.k12.ny.us</a> wrote:

Thanks Ben, sounds like you are on top of things! Keep up the good work and have fun with your Columbia class. I'll check out your work on got.hub a bit later in the summer. Thanks!

-Mrs. Fleming

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From: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Sent: Monday, July 13, 2020 2:09:34 PM

To: Fleming, Kimberly <a href="mailto:kimberlyfleming@wpcsd.k12.ny.us">kimberlyfleming@wpcsd.k12.ny.us</a>

Subject: Re: Just checking in

Hi Ms Flemming,

Thank you for checking in. I am making progress on my research with my mentor, at about the same rate as during the school year. I also read a few journal articles. I have been recording all my hours. I assembled a very helpful hours chart on excel which includes a pie chart to show how far I am out of 90 hours, a line graph for my activity each day, and a bar graph comparing the time spent that day, average time each day, and an estimation of the required future daily time. I applied for an online computer science course at Columbia, which I got into. It is not directly related to my current project, but it will definitely help the project as my project is very computational. Let me know if you would like a more detailed summary of the state of my project. I can give you access to a folder on GitHub.com that contains all of my code, graphs, and eventually documentation. You might need to create an account, though. I hope your summer is going well!

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Thank you! Mrs. Fleming

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From: "Fleming, Kimberly" < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

Date: August 5, 2020 at 12:42:24 PM EDT

To: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

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From: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Sent: Wednesday, August 5, 2020 12:08:37 PM

To: Fleming, Kimberly < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

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Mrs. Fleming

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From: "Fleming, Kimberly" < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

Date: July 13, 2020 at 2:14:11 PM EDT

To: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Thanks Ben, sounds like you are on top of things! Keep up the good work and have fun with your Columbia class. I'll check out your work on got.hub a bit later in the summer. Thanks!

-Mrs. Fleming

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From: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>

Sent: Monday, July 13, 2020 2:09:34 PM

To: Fleming, Kimberly < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Re: Just checking in

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Mrs. Fleming

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From: "Fleming, Kimberly" < kimberlyfleming@wpcsd.k12.ny.us>

Subject: Just checking in

Date: July 13, 2020 at 12:25:07 PM EDT

To: Benjamin Oren Goldman <bg502257@live.wpcsd.k12.ny.us>, Benjamin

Goldman <br/> <br/>bngldmn@gmail.com>

Hi Ben,

Just checking in with you to see how your research is going. Also was

wondering if you were accepted into any of the summer programs you applied to? Please respond with a brief summary of what the status is of your research. Thank you!

Mrs. Fleming

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