

READING WRITING IN THE DISCIPLINES

Reading and Writing Scientific Abstracts Video Transcript

Tracy Tran:

A lot of you have been asking me, "What is an abstract?" That's what we're going to do today.

This year, I've really focused on reading and writing in science, and I think that is what's going to help them the most in college, whether they take another science class or not.

So we're going to figure out what an abstract is, we're going to read an abstract, and then you're going to start writing your own abstract for your project. So can we write this down in our notes, just so that you can refer to it as we're writing? An abstract is a summary of your project, okay? So it's a very short piece of writing. It's about a paragraph long. And it's going to summarize your entire project.

Throughout this year, our students have struggled writing about a topic. In most of the lab reports I've collected this year, I had no idea what they learned from reading their conclusion. It would just restate kind of the research question without actually answering it. I thought that introducing them to this idea of an abstract can help them write in a more concise manner.

Me and Mr. Mahan will come around to pass out a sample abstract for you.

We had a sample abstract so they can read and kind of take a look at what one looks like. It's similar to an annotated bibliography in the sense where it's very specific.

It gets straight to the facts and it has four parts. It has an introduction, a methodology, results, and a conclusion, okay? And what you want to do with this is you want to read through it silently. And you're going to annotate for those four parts that you just wrote down.

In the beginning of the year, every reading handout that they've had had an annotation guide and then we took that scaffold away from them. We told them, "Okay, you guys now have been annotating in this class for half a year, you

know how to annotate now, so we've taken that away from your readings, but you're still expected to do it."

Dennis, can you read that for us?

Dennis:

"*Polistes versicolor*, a wasp native to Ecuador, recently invaded the Galapagos islands."

Tran:

Reading the sample, it was really important for them because they need a model. Whether it's for structure or content, they need something that will provide them with a good foundation, like a base for them to start off with, and that's why I had to give them something that's still about science, but a different topic altogether. And it was really important for us to emphasize that, while you're reading this, you're not reading for the content, you're reading for the different parts. You want to be able to identify and distinguish, and also look at the writing. How did you know that the introduction stops here? How did you know they've moved on to the next part, the methodology? What words were used to tell the reader they're now talking about the results?

Mr. Mahan is going to annotate our abstract right up there. I'm going to call on a few of you to share where the introductions, the methodologies, the different sections are.

Student:

At the end of that, I don't know how to say the "poly" word, but gel electrophoresis, and after that starts the results. Because it says "We found significant morphological differences in relation to elevation," and that said that was the results.

Gabriel Mahan:

Right, "We found." That's signaling, "Here's our data, here's the next section," right? "Here are our results." And what about the conclusion? Marquel?

Marquel:

It starts with, "These data" and that whole sentence, because it basically gives you an overview about what they basically did in the whole paragraph about what they was explaining and what the experiment was about, and that should be basically what the conclusion explains-- the whole paragraph and, like, your base of your experiment.

Mahan:

All right, so that last sentence, you're saying, kind of sums it all up, sets it off, concludes.

Tran:

You're going to start writing your own abstract for your project.

I was very concerned about how they can piece together the really important information that needed to go into an abstract to provide readers with a very concise piece of writing that's very short.

You guys have done your background information, you've done your research, right? You have your conclusion, your results, and everything. Now we want to summarize it in a very concise way. It shouldn't be longer than 300 words.

Mahan:

If you want help getting started, here's a worksheet, here's a graphic organizer that can help you break it up into the four sections. It's optional to use. If you don't want to use it, if you're fine without it, just go straight to the paper, but if you want to use it, feel free to let it help you out.

Tran:

We give students the option of using a graphic organizer, because some of them don't need it. Sometimes students will think they don't need it when they actually do. So we want to let them know that these scaffolds, they're here to help you, but eventually you want to be able to not need it.

How would you introduce your research question? What is your research question?

Brianna:

That's what I was doing.

Tran:

Okay, but what is your research question?

Brianna:

Should we frack? Or should we not frack?

Tran:

Okay, but why are we talking about that? Like, what's the bigger picture here? Why did we do this project?

Brianna:

Because it's damaging stuff.

Tran:

Brianna really struggled with starting the abstract. She said, "I don't know what to write, I don't know what to say, I don't know how to introduce the topic."

So how would you introduce that and also talk about your research question?

Brianna:

Like, say the problem?

Tran:

Yeah. So, with her I had to really ask a lot of questions and get her to think about the bigger picture, and she answered every question.

So, you mean you want to turn your question into, like, a statement?

Brianna:

Yeah.

Tran:

Well, how would you do that?

Student:

I just had it... man. Like... Something about Cuomo? Should we put Cuomo in the...?

Tran:

Oh, what about Cuomo?

Brianna:

Oh.

Tran:

What's unique about an abstract in the science context is the methodology section -- really being clear on how you're answering the problem at hand, the issue, the steps that you took.

My question to you is, I think all of this information is really important. Can we cut this down into, like, two sentences?

Marquel:

She told me that she wanted me to shorten the introduction. Because I had good evidence, but she wanted me to shorten it. So, like, I got straight to the point. Can we try to do that? Yeah. Okay.

Tran:

I think it was very specific feedback for him to be like, "Oh, I can do that."

Brianna, yeah.

Brianna:

Is this good?

Tran:

Can you... okay, read it to me.

Brianna:

Hydraulic fracturing, or fracking, is a method of extracting natural gas from shale rock. The benefit and drawbacks of fracking led us to wonder whether Governor Cuomo should allow fracking in New York.

Tran:

Yes. That's really... high five. Great.