

**VERONIC  
BEZAIRE:**

Hello and welcome to my online classroom. My name is Veronic Bezaire. And I'm from the Department of Chemistry. What I would like to do in this session is share the approaches that I used to create a collaborative learning environment. And, of course, I taught in the winter term 2021.

So, first, let me tell you about this course. The course is Food 2004-- Scientific Communication. It's a core course for students in the food science program. And I created this course after the cyclical program review in our program identified a specific gap in scientific communication. So the course introduces different formats of communications for very specific audiences.

And as an in-person course, it's a lot of fun. It's workshop style. And it's taught in an active learning classroom.

So we do lots of peer teaching. And, typically, there's very positive class dynamics. So my challenge for the winter term 2021 was to recreate the collaborative and hands-on nature of the course in an online format.

So in this session, I would like to share the conceptual approaches that I use to teaching this scientific workshop, not so much the technical know how. So, yes, I used a few simple online tools. But I want to emphasize the design of the learning tasks, the specific prompts that I used to foster a collaborative and active online learning environment.

My teaching framework for scientific writing is based on Bloom's taxonomy. I find that too often we ask students to write or to create communications without first having introduced a theory and having practiced the lower-level cognitive tasks such as identifying key features in an introduction or a discussion of a scientific paper, for example. I, therefore, design tests to be completed in breakout rooms in which students practice and teach each other how to carry out the simpler tasks like identifying and applying prior to asking students to create or critique pieces of communications. So through these tasks, a certain level of trust is developed between students. And that led to some rather successful peer review activities for each of the assignments prior to students submitting the final versions of their work.

So in breakout rooms, students collaborated using shared documents. For example, together, they were asked to identify the subsection of an introduction, for example, in the lab report. Together, they applied theoretical concepts to preselected communications.

So for example, they were presented with, let's say, some text heavy slides. And they were asked to revise them. And, together, they evaluated whether specific statements were appropriate for, let's say, the conclusion of an oral presentation.

In breakout rooms, students also shared their screens. And they did this in the creating phase of their work. So when I asked them to create a lab report, I provided them with raw data. And with this raw data, they had to calculate means. They had to calculate standard deviations and plot graphs.

And I wanted every single student to be able to do this. And so the prompts were clear. They were explicit, asking students to take turns in breakout rooms to teach the others or show the others exactly how they went about doing that.

Last week, students used a social annotation tool called Perusall to read and to critique communications. With Perusall, students can work in groups to annotate text or videos. And this can be done asynchronously or synchronously.

In this particular course, I use Perusall synchronously. But whether it's synchronous or asynchronous, I find that the social aspect of the tool helps make reading an interactive task. And in this matter, I found that students were much more engaged with the material. This is a preview of the approaches I used to teach scientific communication workshop. To find out more, please join us for my Welcome to My Classroom session.