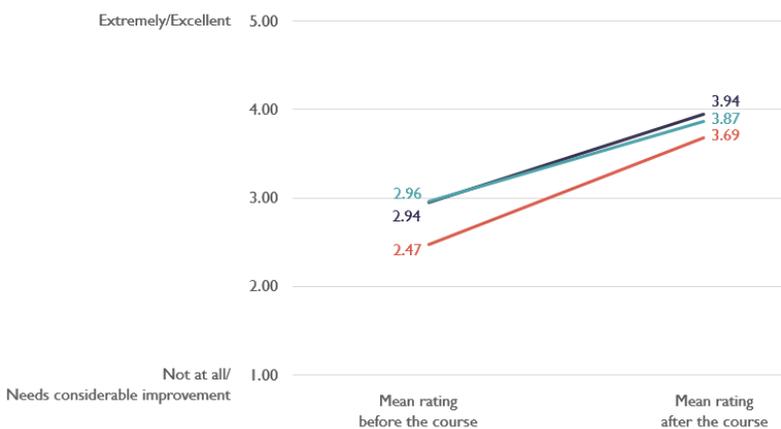


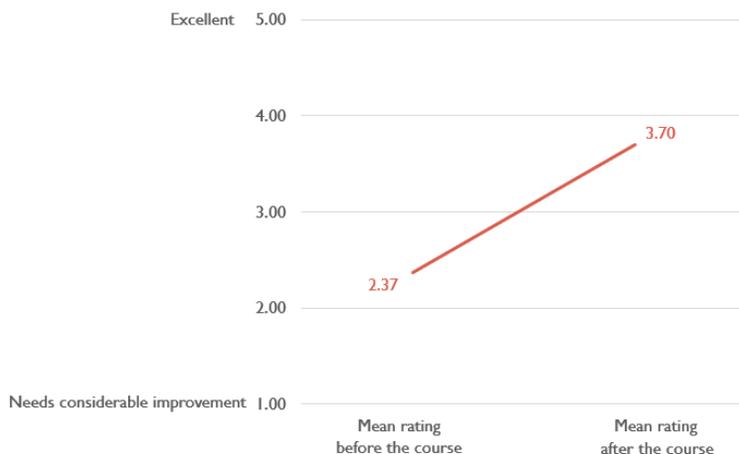
Highlights of the Science Communication Online Programme (SCOPE) at Northwestern University

SCOPE is an online eight-week course designed to teach effective science communication to STEM graduate students without access to in-person training. A group of 46 individuals participated in a pilot course in Fall 2019. Based on survey feedback from 25 respondents (54% response rate), the course was revised and the first official course was launched in Summer 2020. Of the 46 students who enrolled in the course, 27 (57% response rate) completed a pre and post survey that assessed their skills before and after participation in the course. A summary of key findings from the first official course is presented here with the goals of the course.

Goal 1: The program improved respondents' confidence, comfort, and ability to speak about research to people outside their area of expertise.

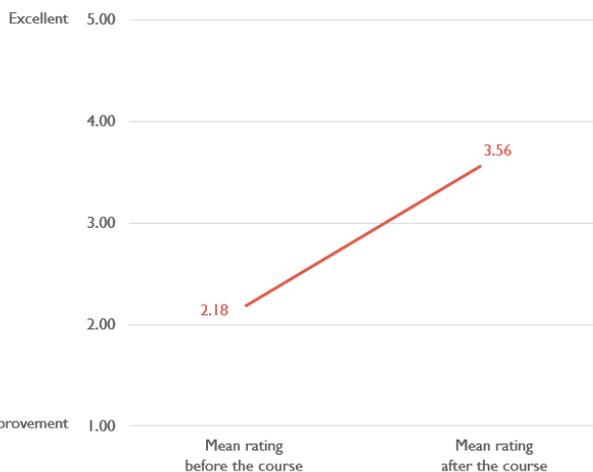


Goal 2: The program improved respondents' ability to utilize visuals effectively to convey their message.

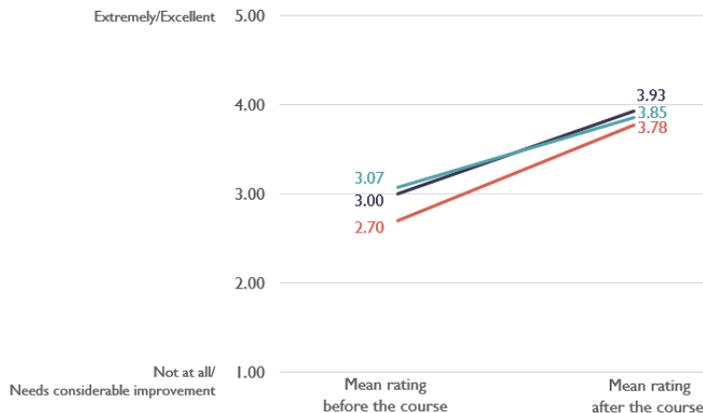


"I found this entire course incredibly useful. My most important takeaways are probably crafting the narrative of my research and using effective visualizations. The development steps for crafting a presentation in module 4 helped me reframe the way I plan presentations to form a much better story. The module[s] build on each other really well so it's impossible to isolate one - since the reason I was able to do module 4 depended on what I learned in the previous modules."

Goal 3: The program improved respondents' ability to employ a variety of techniques to speak and write persuasively.



Goal 4: The program improved respondents' confidence, comfort, and ability to adapt their writing styles and content to improve communication with different audiences.

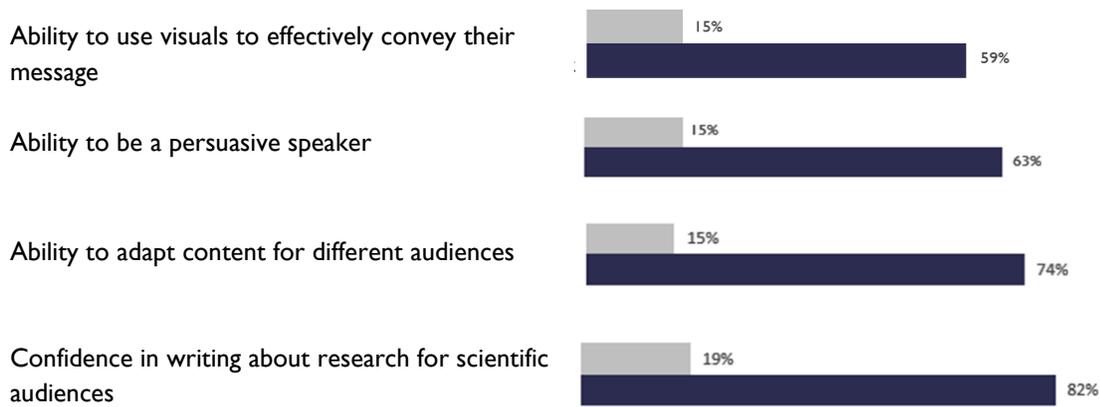


"I enjoyed the short videos, quick exercises, resources/tips, feedback from other classmates."



After participating in the course, the majority of respondents had increased ratings in the following skill areas, compared to their ratings before the course:

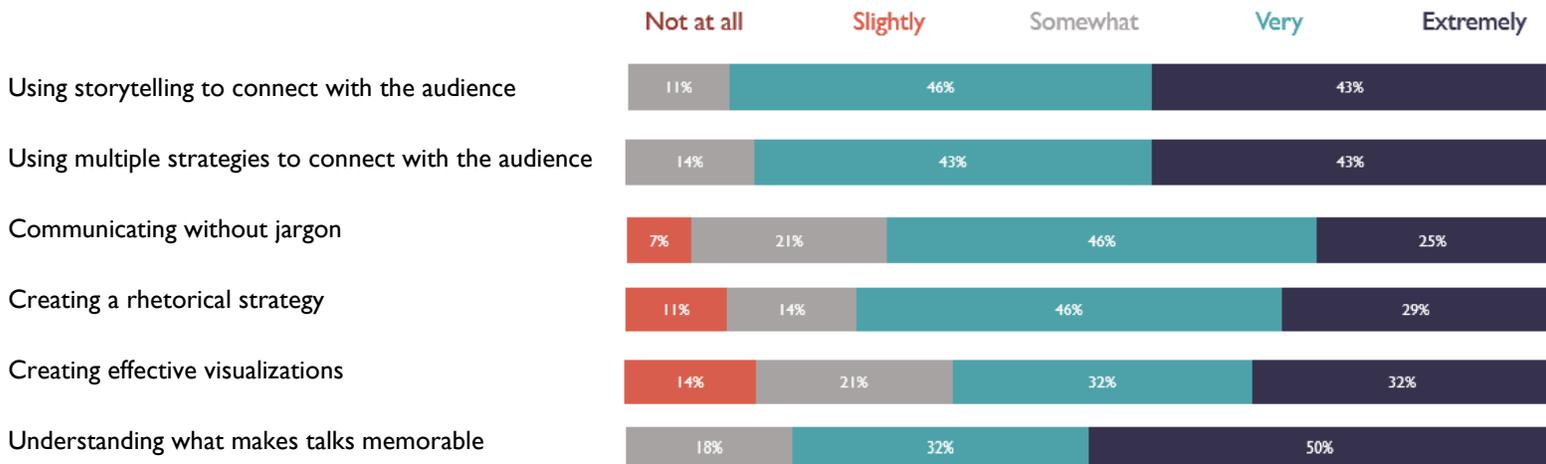
% of Very/Extremely and Very good/Excellent ratings at **Pre** and **Post**



“I loved how this course was structured. Taking each module as a building block and working up to a 3 minute presentation was an excellent format for scaffolding these skills. My most important takeaways are to SLOW DOWN and plan effectively. The rhetorical strategies, storytelling framework, and visualization strategies were the most impactful for me.”

“I am planning to continue to use the worksheets and the tips whenever I need to develop a talk or write a paper and even just to help me craft better narratives and use tools for effective communication.”

The majority of respondents reported that the course was useful for increasing abilities related to:



“The modules where we workshopped our own content were the most helpful for improving my own communication skills. Modules that did this especially well were the ones in which we submitted a title or one minute talk, got feedback from peers, then resubmitted with improvements. That forced me to think about how to actually improve what I had made or thought of, rather than just learning about the theory of how to do something better. For this reason, as well as the other assignments, I found this to be one of the most effective online courses I've taken.”

