

Developing Science-Specific Writing Resources

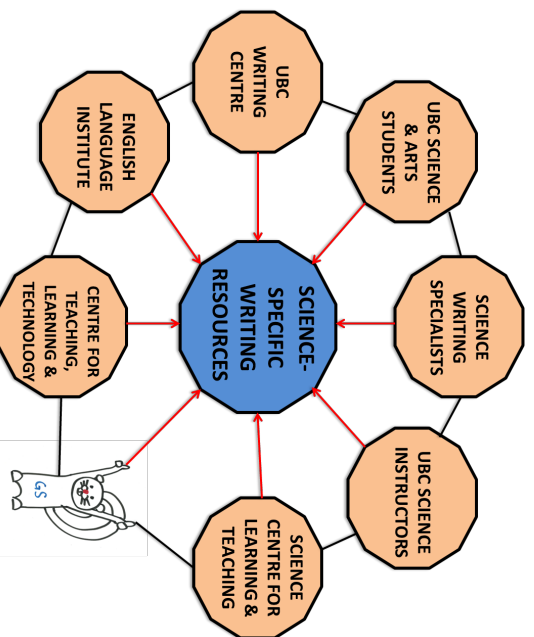
Jackie Stewart¹, Meghan Aubé², Thomas Deane³, Eric Jandiciu⁴, Randall Lau³, Gülnur Biröl⁴, Alice Cassidy³, Joanne Fox⁵, Ramona Montagnese²
¹Department of Chemistry; ²UBC Writing Centre; ³Faculty of Science; ⁴Science Centre for Learning and Teaching; ⁵Michael Smith Laboratory
 The University of British Columbia, Vancouver, Canada

Project Goals

- To support two writing-intensive science courses (**SCIE 113 & SCIE 300**) and UBC's Place and Promise Strategic Plan by creating writing resources that help students:
- Develop science-specific communication skills to address specialist and non-specialist audiences (via technical reports, blogs, oral presentations, podcasts, videos and journalistic articles).
- Foster critical thinking and develop logical argumentation skills.
- Evaluate the impact of our resources on the development of student writing skills.

Collaborators

The Science-Specific Writing Resources team comprises students, faculty, educational strategists, and writing specialists with diverse expertise in a variety of disciplines.



Our Resources and Their Impact

Developed

Resource	#	Potential Impact
Essay writing guides & quizzes	4	Available to ~400 SCIE 113 students/year
Calibrated peer review essays	3	Used for peer feedback to ~400 SCIE 113 students/year
Hands-on writing classes: Pre-class quizzes In-class workshops Post-class quizzes	7 7 7	Used as SCIE 300 assessments for ~200 students/year
Writing skills videos featuring Grammar Squirrel	5	Available to anyone

In Progress

Resource	Potential Impact
Online repository for all resources	Available to anyone
Writing error diagnostic rubric	Available to all instructors
Universal citation tool	Available to all science students
Instructional tools and guides	Available to all instructors
Additional writing skills videos featuring Grammar Squirrel	Available to anyone

Writing Skills Videos

Watch all the videos by visiting our YouTube channel using the QR code or this URL: bit.ly/17Y09Yg

Hands-on Writing Topics

- Paragraph structure, topic sentences, effective transitions
- Active and passive voice
- Numbers, units, grammatical mechanics
- Succinct writing, removing jargon
- Descriptive and comparative techniques
- Choosing and quoting sources, writing news articles
- Summarizing, paraphrasing

Student Feedback

“Clarity is essential to communicating effectively. Regardless of what comparisons, stats, and visuals you have, if you’re unclear, you’ll get nowhere.”

“... this is something that writing paper after paper would not have taught you. This is a way to open up science to a wider range of people, just by using simple, but clear comparisons.”

“This writing activity taught us how to effectively use other researchers’ information without completely copying it.”

Acknowledgements

We thank the **UBC Teaching and Learning Enhancement Fund** for support in the 2012/13 and 2013/14 academic years, as well as the UBC Science Centre for Learning and Teaching and the UBC Centre for Teaching, Learning and Technology for in-kind contributions. We also thank the students and instructors who gave feedback and road-tested our materials and resources.