

# Science Communication Flipped: Teaching and Learning Resources for Improving Science Writing



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*“I find my writing skills are lacking.”*

*“Amazing that these skills are not taught  
but are expected.”*

*“There should be a course that prepares us to  
read and criticize scientific papers...and also to  
write them more effectively.”*

*Student satisfaction survey, 2010*



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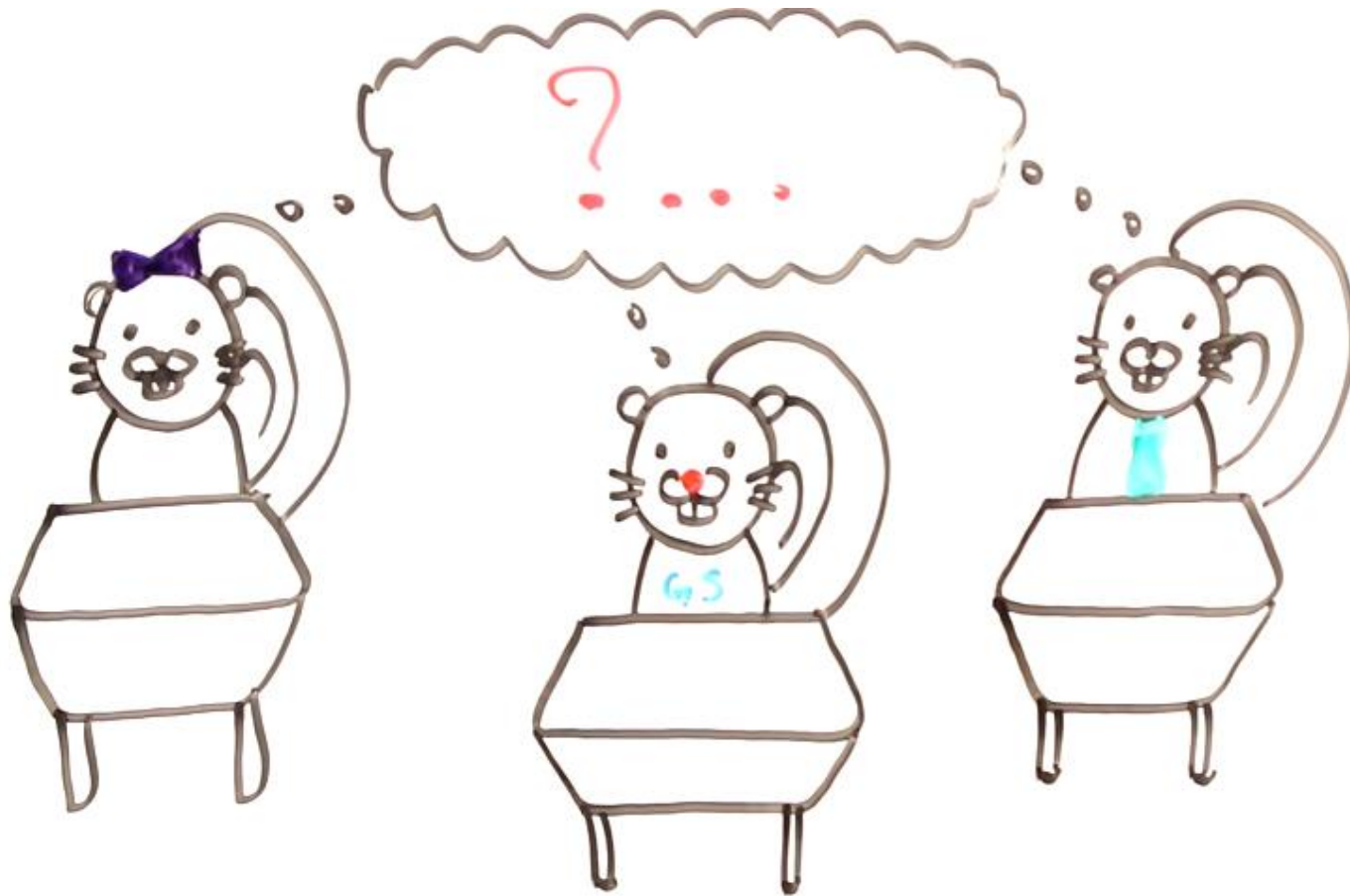
*“It might be nice to have a clear way of articulating writing challenges - sometimes I don’t have the language to say what the problem is - only that it isn’t right.”*

*“TA training would help a lot. The quality of the feedback on writing can vary from TA to TA.”*

*“I’m not an English prof, so it’s challenging to provide specific, meaningful feedback”*



Have you had similar feedback at your institution or organization?



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Pre-class preparation

Information transfer,  
gain familiarity

← Feedback

In-class activities

Refine through  
collaboration  
(peer review)

← Feedback

Post-class review

Develop fluency

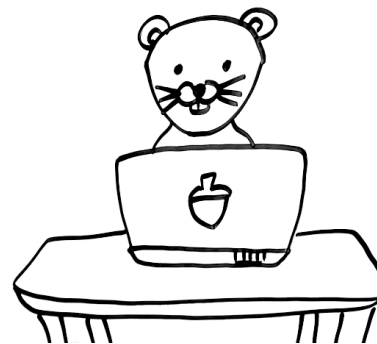
← Feedback

Projects

Application

← Feedback

Effective  
communication

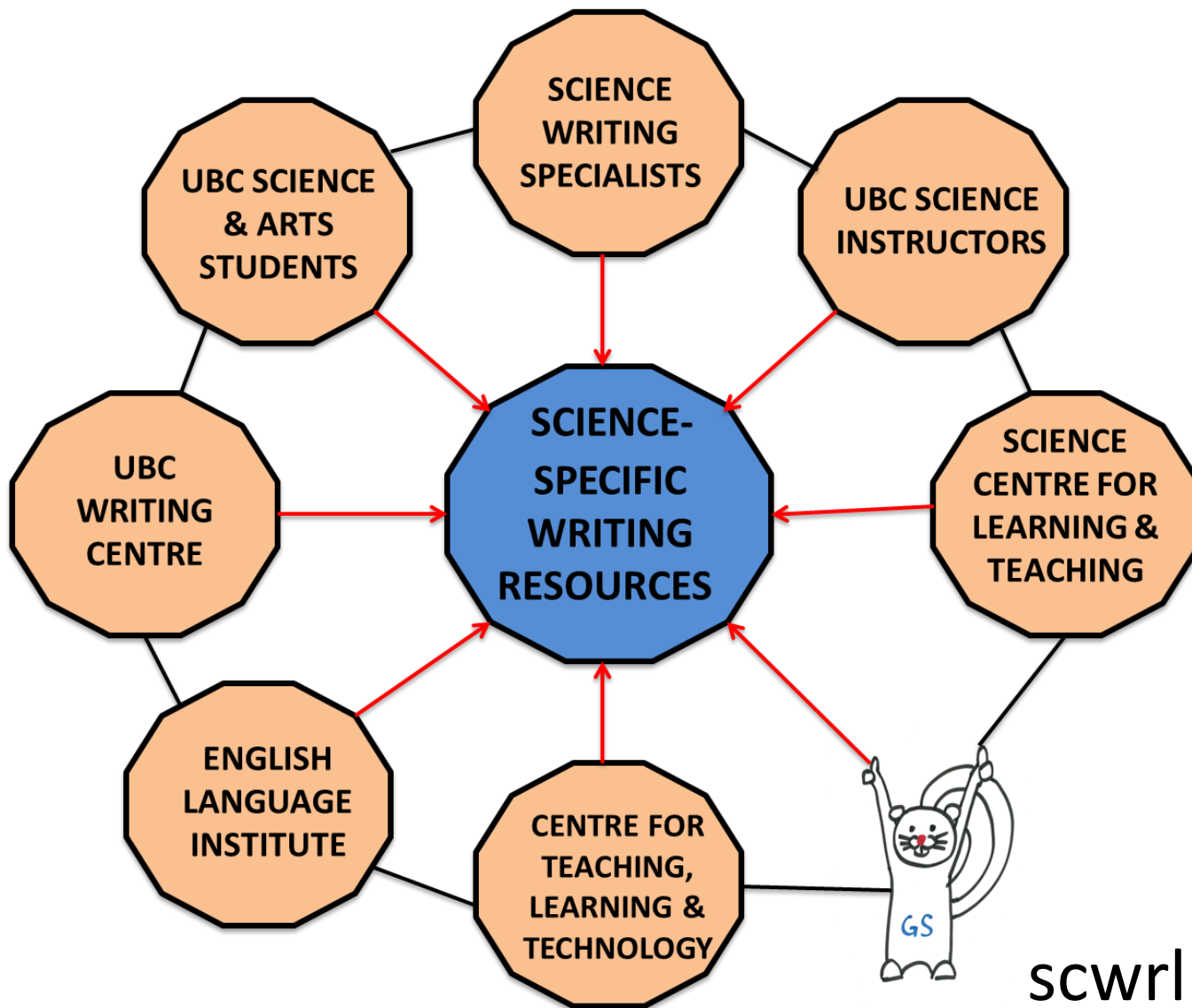


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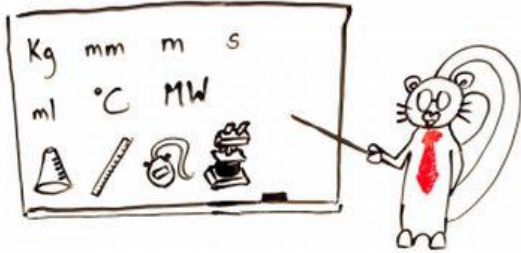
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# Science Writing Resources for Learning



Educator Resources



Student Resources



UBC YouTube Science Writing Channel



Active vs. Passive Voice



Numbers, Units and Mechanics



Paragraph Structure, Topic Sentences and Transitions



Succinct Writing and Dealing with Jargon



Integrating and Citing Sources



Using Quotations and Paraphrasing in Journalistic Writing

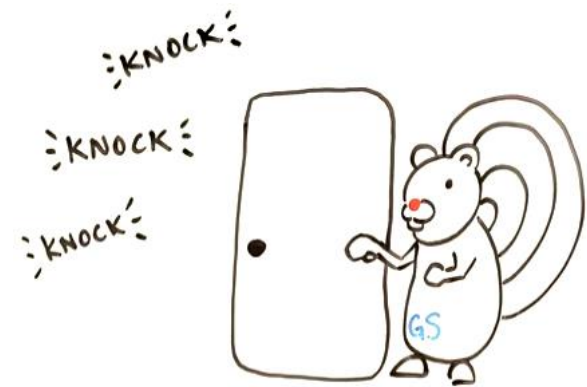
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# Citing Sources in Science Writing



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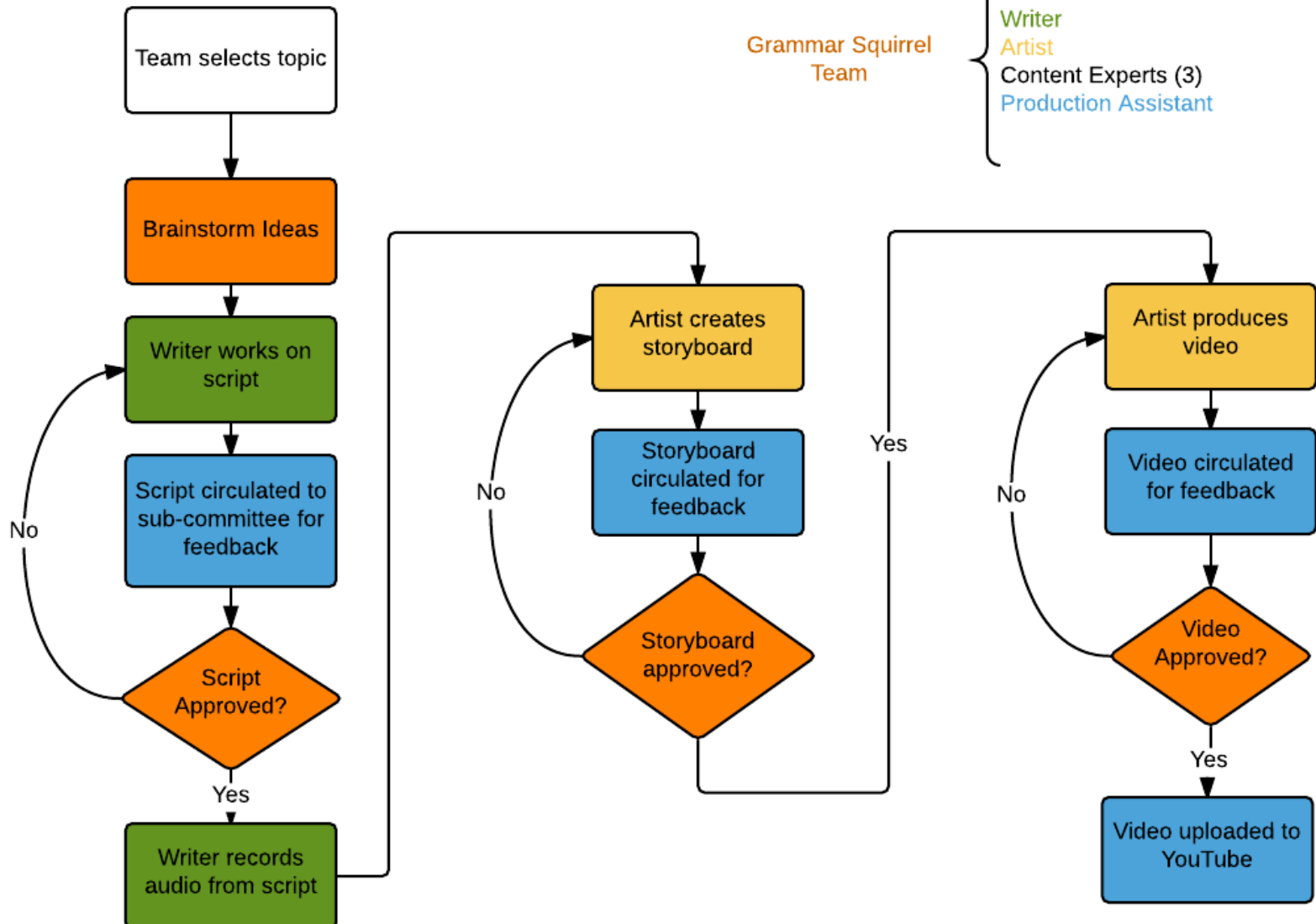


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*30% storyboarding*  
*20% drawing/interview*  
*5% audio*  
*45% editing*

*Production time:*  
20–25 hours per video

*Equipment:*  
Canon DSLR camera, tripod,  
good microphone

*Software:*  
Final Cut Pro X

*Tips:*  
Consistent lighting, good  
microphone, planning

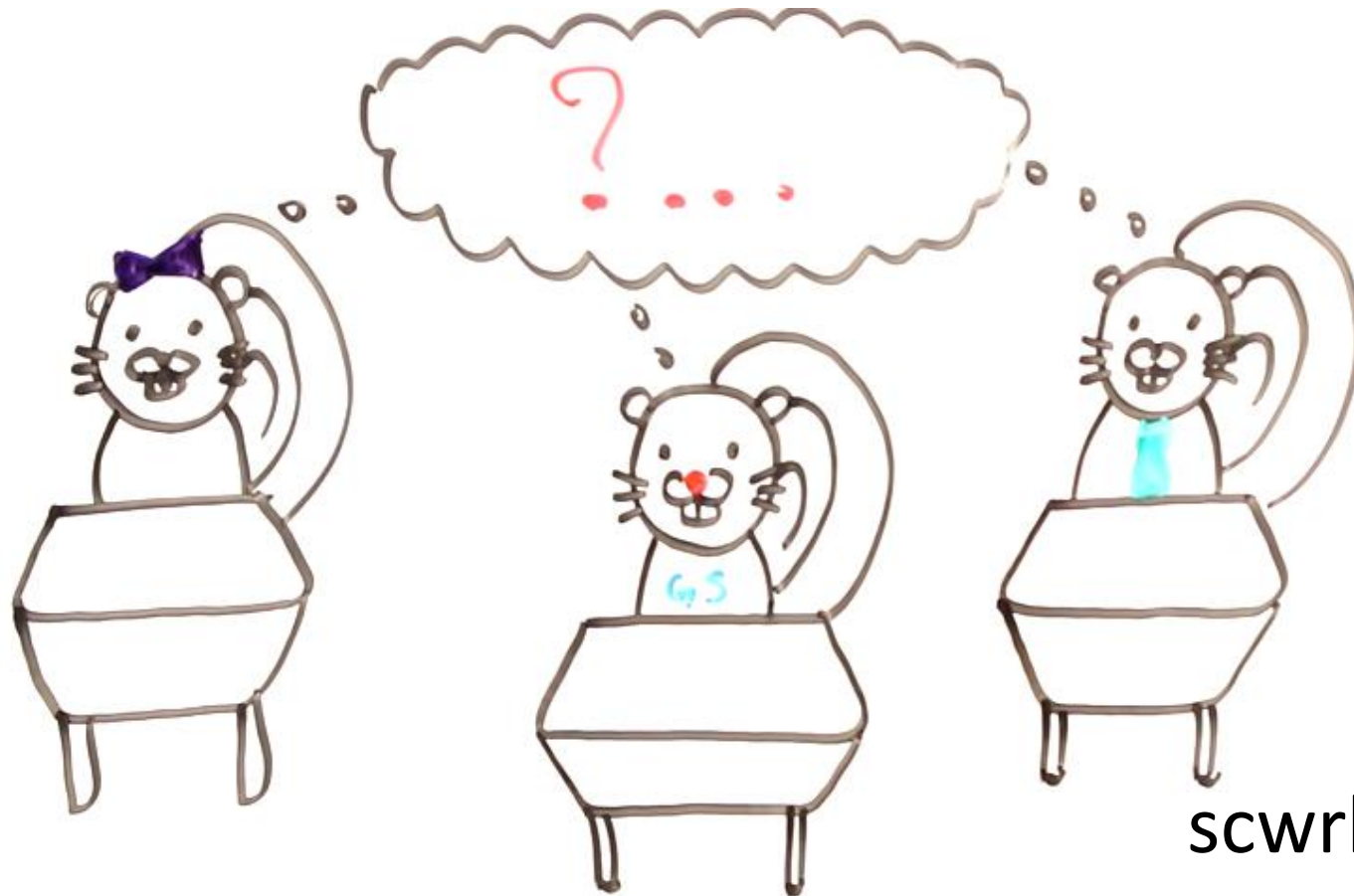
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How is your video production process similar?  
How is it different? Any additional tips?



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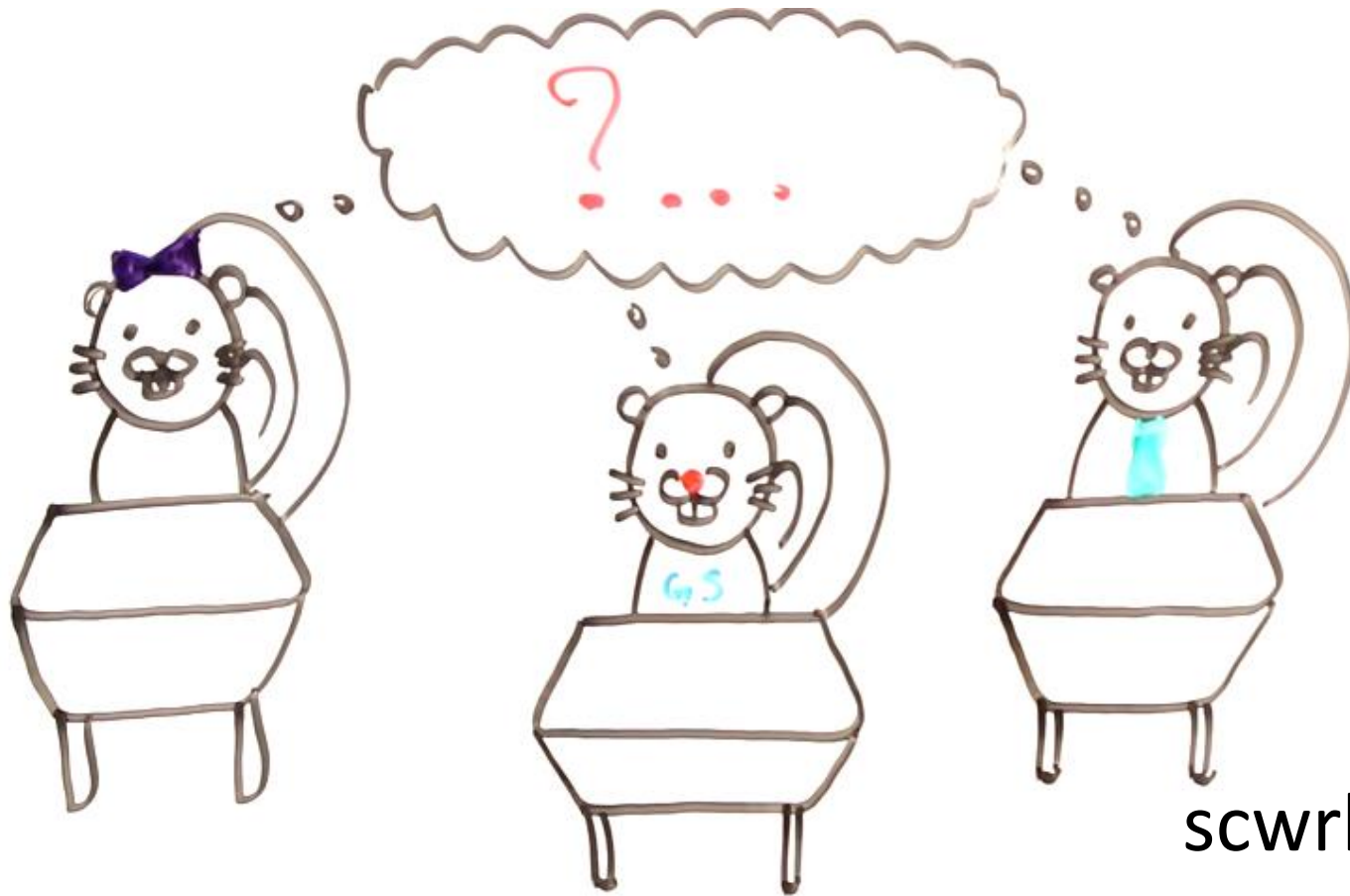
# Science Writing Resources for Learning

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Resource	Potential Impact
<b>Instructional tools and guides</b>	Available to instructors/TAs
Writing error <b>diagnostic rubric</b>	Available to instructors/TAs
<b>Universal citation tool</b>	Available to anyone
<b>Writing skills videos</b> featuring Grammar Squirrel & UBC experts	Available to anyone
Pre-, in-, post-class <b>writing activities</b>	Available to anyone
<b>Calibrated peer review</b> assignments	Available to instructors/TAs



What resources would you like to see?  
Additional questions/comments?



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