



Intro. to Scientific Writing



Mallarie Yeager
(she/her/hers)
yeager.m@northeastern.edu

About Me

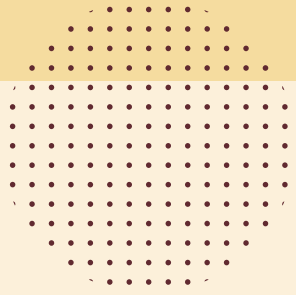
- A PhD Candidate at Northeastern University (Boston, MA)
- Study fish communities in RI
- Originally from Florida
- Did my Masters at SDSU (San Diego, CA)
- Just adopted a dogo ----->



 @mallarie_yeager




Scientific Writing



01

Main goals
and styles




03

Writing tips
and resources

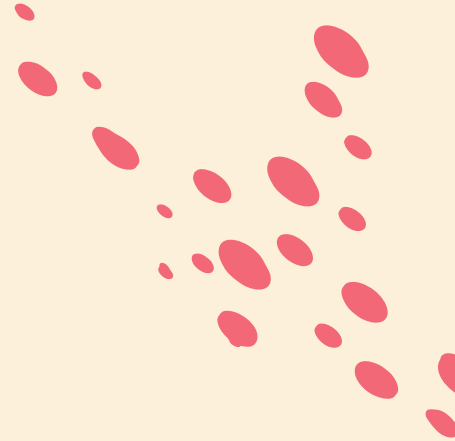
02

Structure of a
scientific paper



04

Writing
exercise



01

Scientific Writing: Goals

1. Concise and Precise

- Communicate scientific information succinctly
- We do not want: Flowery, ambiguous, wordy and redundant language

2. Primary Audience Other Scientists

- Helps to reduce explanation of methodology or concepts
- However, more challenging to communicate to non-scientists

3. In Context with Previous Work

- Science is always building on itself so we must always relate to past work in our field

Purpose:

To present data and/or ideas with a level of detail that allows a reader to evaluate the validity of the results and conclusions based only on the facts presented

01

Scientific Writing: Styles



Peer-Reviewed Papers

Journal articles which present on primary research you and collaborators conducted



Grant Proposals

Scientists need funding in order to conduct research. Proposals are proof to funding agencies that researchers can accomplish the project



Literature Reviews/ Meta-analyses

Summarizing and synthesizing research that has already been carried out.

02

Scientific Writing: Structure

5

ABSTRACT

- Summarizes the paper

Writing
Order

4

INTRODUCTION

- Introduce why your research is important to and relevant in your field
- Presents problem and proposed solution

1

METHODS

- Describe *exactly* how the experiments and analyses were conducted

3

DISCUSSION

- Interpret findings
- Explore broader implications of those findings

2

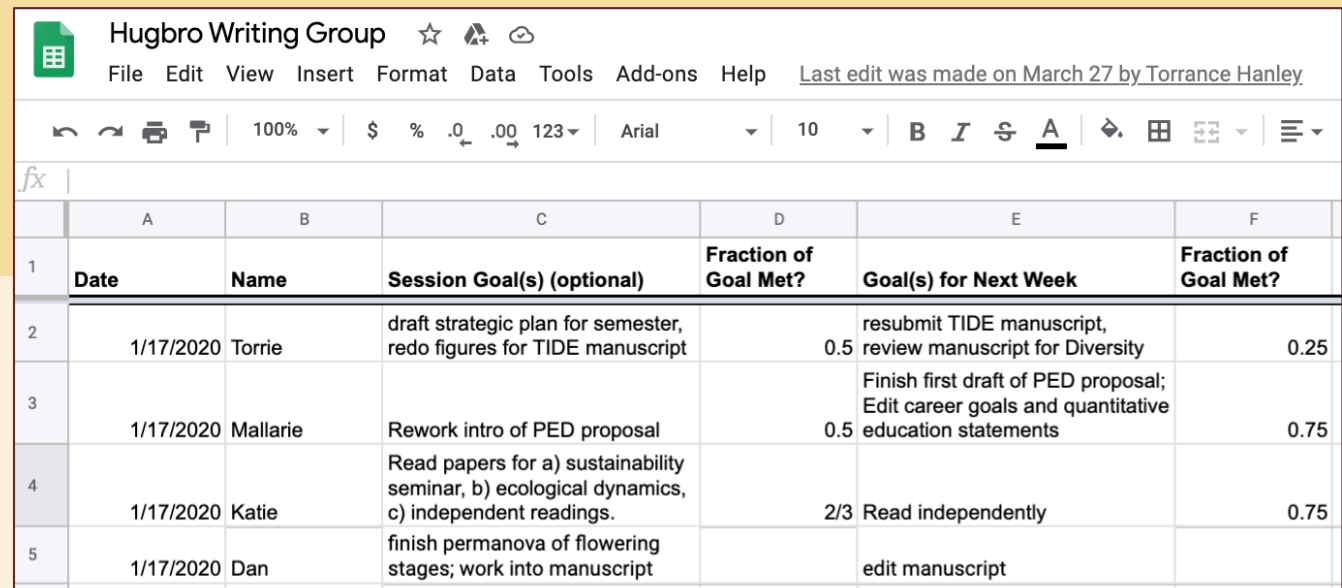
RESULTS

- States the results of experiment(s) and analyses without interpretation

03

Scientific Writing: Tips & Resources

1. Form a weekly writing group
 - Creates goals and accountability among peers
 - Allocates *quiet* time to write



Hugbro Writing Group

File Edit View Insert Format Data Tools Add-ons Help Last edit was made on March 27 by Torrance Hanley

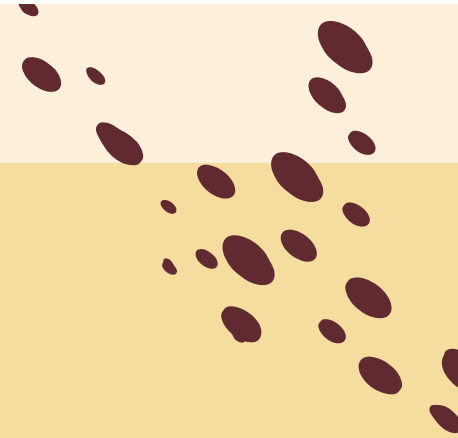
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	A	B	C	D	E	F
1	Date	Name	Session Goal(s) (optional)	Fraction of Goal Met?	Goal(s) for Next Week	Fraction of Goal Met?
2	1/17/2020	Torrie	draft strategic plan for semester, redo figures for TIDE manuscript	0.5	resubmit TIDE manuscript, review manuscript for Diversity	0.25
3	1/17/2020	Mallarie	Rework intro of PED proposal	0.5	Finish first draft of PED proposal; Edit career goals and quantitative education statements	0.75
4	1/17/2020	Katie	Read papers for a) sustainability seminar, b) ecological dynamics, c) independent readings.	2/3	Read independently	0.75
5	1/17/2020	Dan	finish permanova of flowering stages; work into manuscript		edit manuscript	

03

Scientific Writing: Tips & Resources

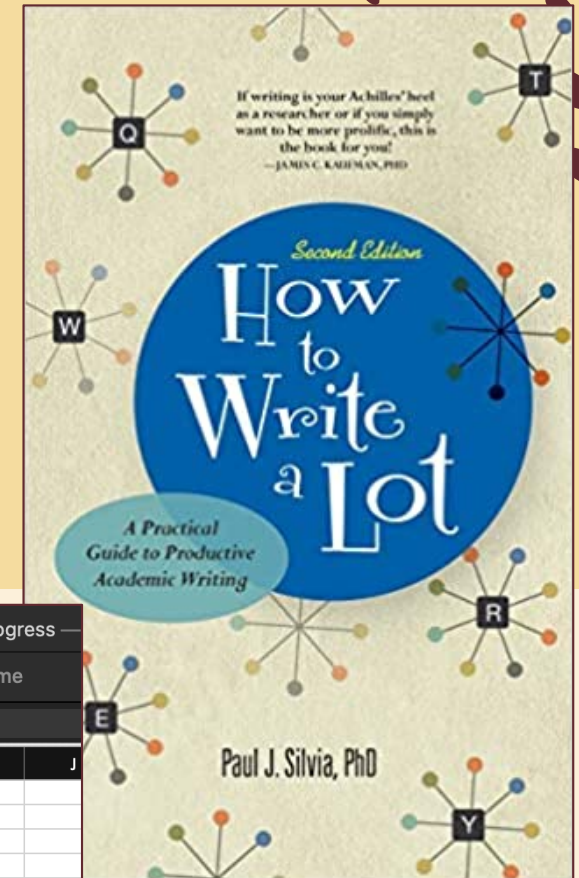
1. Form a weekly writing group
 - Creates goals and accountability among peers
 - Allocates *quiet* time to write
2. Set aside time to write everyday
 - Possibly with a beverage of your choice
 - Be sure to edit sober ;)



03

Scientific Writing: Tips & Resources

1. Form a weekly writing group
 - Creates goals and accountability among peers
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2. Set aside time to write everyday
 - Possibly with a beverage of your choice
 - Be sure to edit sober ;)
3. Keep a record of daily writing
 - From book: "How to Write a Lot"



	A	B	C	D	E	F	G	H	I	J
1	Month	Date	Day	Words	Goal	Project	Comments	Year		
2	Feb	17	Monday	201	Met	CH 2		2020		
3	Feb	18	Tuesday	92	Met	CH 2		2020		
4	Feb	19	Wednesday	0	Unmet	CH 2		2020		
5	Feb	20	Thursday	136	Met	CH 2		2020		
6	Feb	21	Friday	188	Met	CH 2		2020		
7	Feb	22	Saturday	0	NA			2020		

04

Scientific Writing: Writing Activity

Movie into Abstract

Directions:

1. Pick your favorite movie.
2. Write 6-8 sentences summarizing the movie into the structure of an abstract

ABSTRACT STRUCTURE

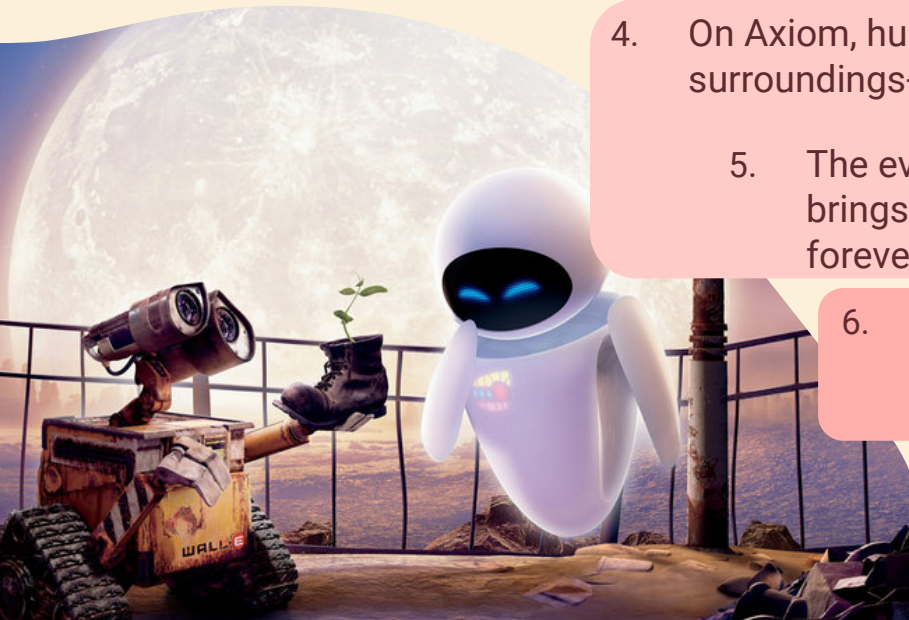
- 1-3 sentences explaining the intro/building of plot
- 1 sentence describing the objective/conflict
- 1-2 sentences summarizing how they accomplished objective/conflict
- 1-2 sentences discussing the results of objective/accomplishing conflict

04

Scientific
Writing:
Writing Activity

WALL-E

1. Human's abandoned Earth and left behind robot WALL-E to pick up accumulated trash.
2. When a spaceship, EVE, comes to earth in search of living plants, WALL-E falls in love and gives her Earth's last living plant.
3. Upon receiving plant, EVE gets picked up by spaceship and WALL-E follows.
4. On Axiom, humans have become so fat and lazy, they are unaware of their surroundings- including the fact that a group of robots have taken charge.
 5. The evil autopilot, Auto, tries to get rid of the discovered plant EVE brings back to the spaceship, in order to keep humanity on Axiom forever.
6. This compels WALL-E, EVE, the pilot and some malfunctioning robots to retrieve the plant from Auto and begin the transition back to Earth.
7. They make it back to Earth with the only living plant to start cultivating natural life again.





Thanks!

**Happy to take
any questions!**

Email: Yeager.m@northeastern.edu