



STUDENT-LED RESEARCH IN THE UNIVERSITY CLASSROOM.

UNIVERSITY OF ELECTRO-COMMUNICATION / UNIVERSITY OF
THE SACRED HEART

SCOTT ANDREW MCLELLAN
(ID #412)

SCOTT@MCLELLAN.CO

Setting the Scene

UEC 2nd Year Academic English (Public Science University)

Genre Based Syllabus

1st Semester Focus -> Presentation Focus

2nd Semester Focus -> Research paper Focus

...

Previously instructors focused on (a) Literature Reviews or (b) Data set analysis

I wished to focus on student-led research.



Why Student-led Research

- ▶ UEC students are primarily science majors. This approach focuses on learning and utilizing skills that are relevant to them.
- ▶ Student-led research involves the students in the learning process at a deeper level, learn [ing] not just by listening and discussing but also by doing (Strangfeld, 2013, p.204).
- ▶ It helps to engage students directly, focus on active learning and not passive engagement. (Strangfeld, 2013, p.205).
- ▶ Student-led questionnaire research allows students to “learn by doing” with the support and guidance of an instructor. This generates a lot of enthusiasm and promotes autonomy. (Gelman & Nolan, 2002).
- ▶ Focusing on student choice can lead to greater self-efficacy, and increased motivation (Anderson, 2016), (Lawrence, Jefferson and Osborn, 2017).
- ▶ I wanted to apply these concepts in the EFL classroom.



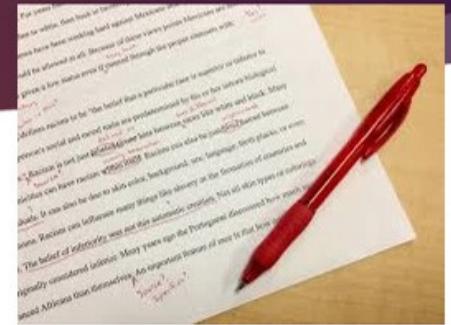
The students



- ▶ 1st –Year Entrance Requirements
TOEIC L & R 450 points or more
TOEFL PBT 453 points or more,
TOEFL iBT 46
- ▶ 1st Years – Academic Written and Spoken English (1st and 2nd Semester)
- ▶ 2- Years – Academic English -> My Class
- ▶ Many will go on to take Technical English courses in the future.

Overview

- Students will
 1. Create questionnaires on a chosen topic.
 2. Gather responses.
 3. Analyze the data.
 4. Write a research paper about their findings.
 5. Present their papers to the class.



90-minute class Plan

30 – 40 Minutes

General Skills

In-Class Graded Reading

Vocabulary Review

Quick-writing Exercises

50-60 Minutes

Project Work

Direct Instruction

Interactive Group Activity

Lead-in to Homework

Part I .How to Introduce Questionnaires

- ▶ Introduce the concept initially with interactive activities
 - ▶ "Find someone who"
 - ▶ Practice with real surveys
 - ▶ Creating questions from prompts
 - ▶ Use lots of examples, make the concept less abstract.



Example Activity

1) Find someone/people in the class who did/didn't do the following during the last holiday :

Find someone who read a book → name _____ → title _____

Find someone who played tennis → _____

Find someone who cooked a meal → _____ (what? _____)

Find two people who didn't go to a party → _____ & _____

Example

英語

Questionnaire (お伺書)

Date (日付) ____ / ____ / ____

In order to know about the safe use of medicines, please fill in the following questionnaire.
(お薬を安全に使っていただくために質問しております。ご記入をお願いします。)

Name : _____ Sex : (☐ Male , ☐ Female) Weight : ____ kg

Address _____ Phone No. _____

<項目>

■ Medical History (病歴)

- ☐ Nothing
- ☐ Heart Disease (心疾患) ☐ Liver Disease (肝疾患) ☐ Kidney Disease (腎疾患)
- ☐ Glaucoma (緑内障) ☐ Gastric Hyperacidity (胃酸過多)
- ☐ Stomach ulcer, Duodenal ulcer (胃潰瘍, 十二指腸潰瘍)

Lead into Explicit Explanation of Surveys

- ▶ Introductory material borrowed heavily from business courses and data collection training manuals.
- ▶ Why survey Research?
- ▶ Merits and demerits
- ▶ Sample sizes
- ▶ Question type and creation



Survey Research - Type of Question



a. Information Questions

Do you commute to UEC?

☐ 1. Yes

☐ 2. No

b. Opinion Questions

Technology helps education.

☐ 1. Agree

☐ 2. Disagree

c. Demographic Questions

What is your current marital status?

☐ 1. Married

☐ 2. Not Married

d. Special Questions

Could you tell us more?

Creation of Groups, Topic Selection, and Questions

A	Step 1:	Identify the Purpose of your Survey			
	What are you studying		What is your Hypothesis	How will you use the survey?	
	The sleep patterns of college students.		Most students sleep less than the medically recommended minimum hours of sleep.	Email Survey with Google forms	
B	Step 2:	Draft your questions			
	Objective	Fact or Opinion	Question	Measure Type	
	1	Demographics	Fact	Are you a college student?	Yes/No
	2	Demographics	Fact	What is your gender?	Multiple Choice
	3	Demographics	Fact	How old are you?	Range or Direct Entry
	4	Demograhpics	Fact	What year are you in?	Multiple Choice
	5	Average ammount of Sleep a night (weekdays).	Fact/Opinion	What is the average ammount of sleep you get per night on weekdays?	Scale
	6	Commute Distance	Fact	How long is your commute to school?	M/C scale.
	7	Job	Fact	Do you	

Adapted from 2012. UC Regents, D. West and T. Kelly.

Follow-up With Examples of “Bad” Questionnaire and “Bad” Questions.

Questionnaire to find out about eating habits of teenagers

- 1) Name:
- 2) Age: Year 7 ☐ Year 8 ☐ Year 9 ☐ Year 10 ☐ Year 11 ☐
- 3) Do you think Junk Food is bad for you? Yes ☐ No ☐
Why?
.....
.....
.....
- 4) Do you eat a lot of junk food? Yes ☐ No ☐
- 5) How much fruit do you eat in a week? 1 ☐ 2 ☐ 3 ☐ 4 ☐
- 6) How often do you do your maths homework? Always ☐ Sometimes ☐ Never ☐
- 7) Do you or do you not like eating at the following restaurants?
McDonalds ☐ Burger king ☐ KFC ☐ Subwav ☐



Don't use **(2 Questions in 1)**

“Do you think Coca-Cola is a tasty and refreshing soft drink?”

(Incorrect)

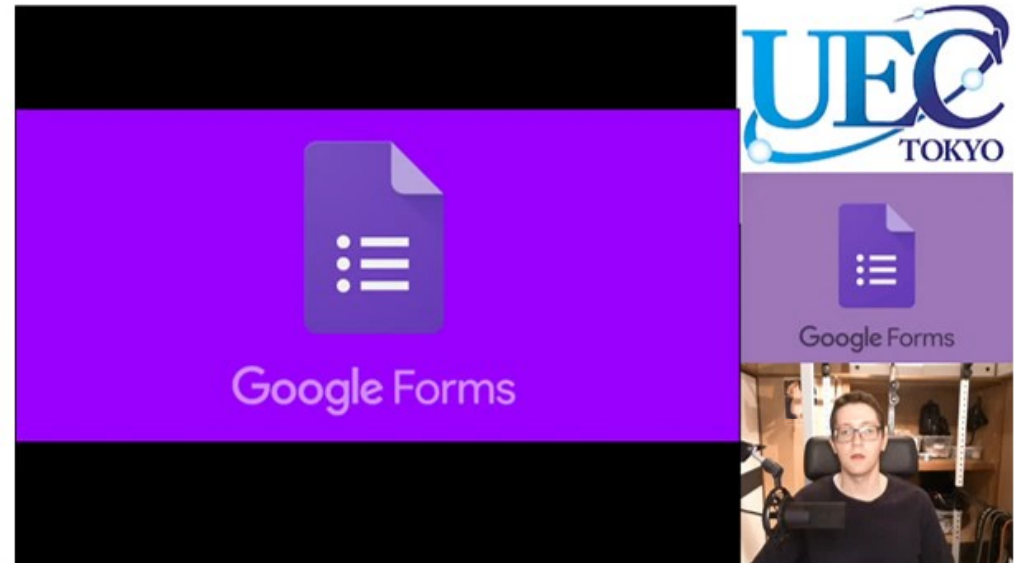
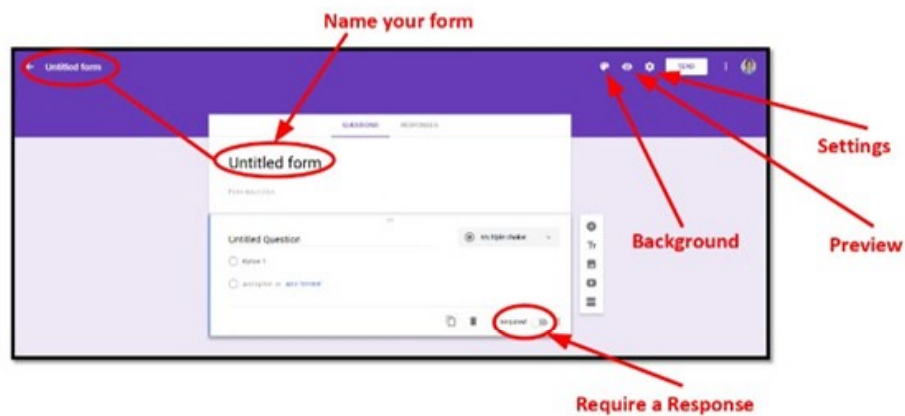
“Do you think Coca-Cola is a tasty soft drink?” and

“Do you think Coca-Cola is a refreshing soft drink?”

(Correct)

Creating Questionnaires

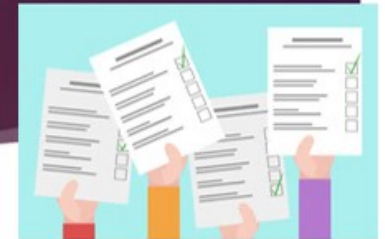
Creating a Form from Scratch



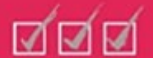
Adapted from T. Meredith, UWE Ed Tech Specialist August 22, 2017

Piloting and Testing Questionnaire

- ▶ Give student a lot of opportunity to Pilot their questionnaires in class.
- ▶ Questions testing, question rephrasing and double interview are all valid methods.
- ▶ These methods and procedures are sourced from Constructing questions for interviews and questionnaires: Theory and practice in social research.
- ▶ Final Step instructor approval of questionnaires.



CONSTRUCTING
QUESTIONS FOR
INTERVIEWS AND
QUESTIONNAIRES
THEORY AND PRACTICE
IN SOCIAL RESEARCH



William Foddy

Research Papers

- ▶ Introduction Section
- ▶ Literature review
 - Research, citation and writing
- ▶ Materials and Procedure
- ▶ Discussion and Conclusion



The problem with literature Reviews....

- Introduction
Theory / Argument / Hypothesis

- Author1 says this ...

- Author2 says this ...

- Author3 says this ...

- Author ∞ says this ...

- Conclusion

- Introduction
Theory / Argument / Hypothesis

- Theme 1: _____ (subheading)

Author1

Author2

Author3

- Theme 2: _____ (subheading)

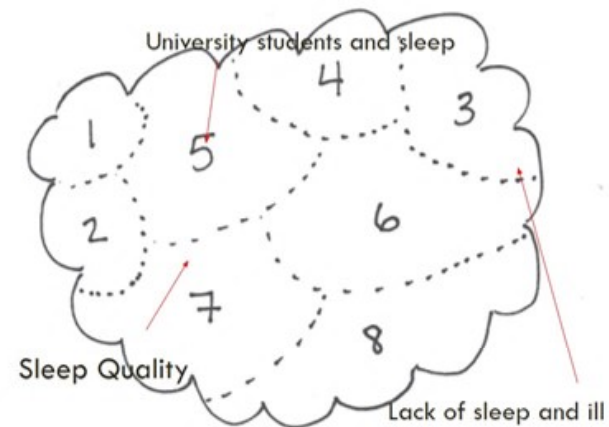
Author4

Author5

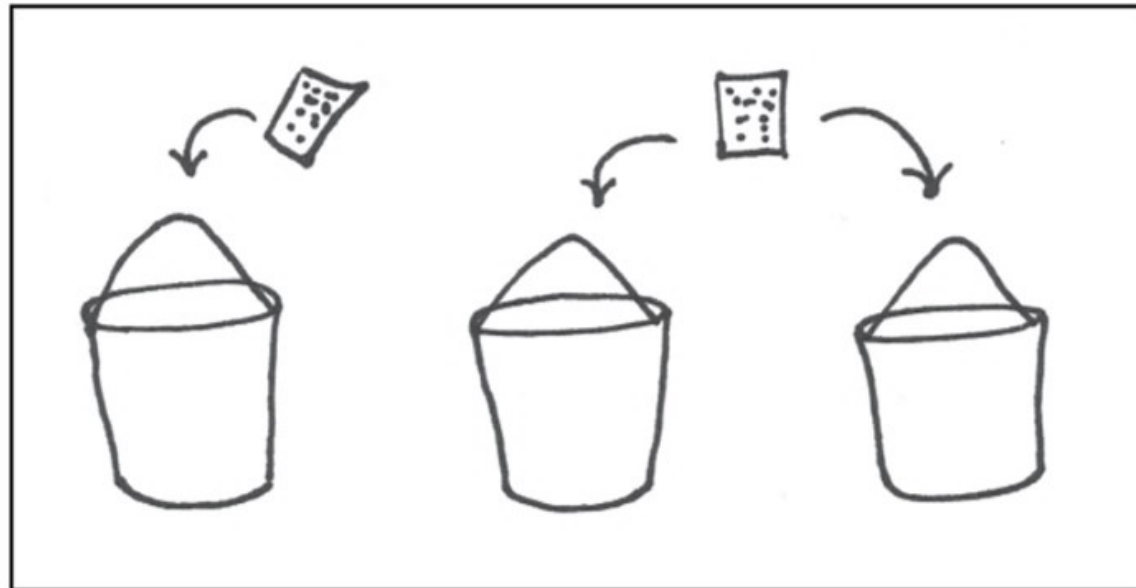
Author6

Conclusion

Narrowing our Focus



Cisco, J. (2014). Teaching the literature review: A practical approach for college instructors. *Teaching and Learning Inquiry*, 2(2), 41-57.



Cisco, J. (2014). Teaching the literature review: A practical approach for college instructors. *Teaching and Learning Inquiry*, 2(2), 41-57.

Visualizing Literature Review

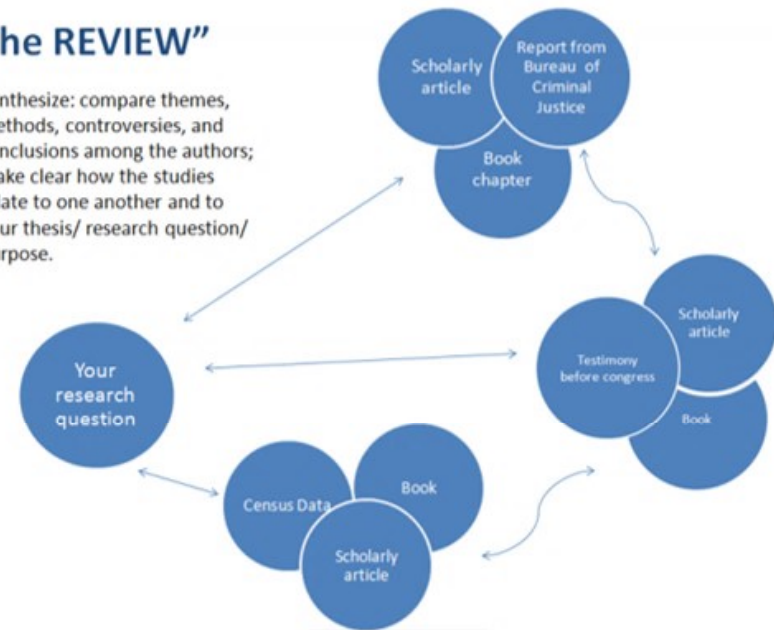
“The LITERATURE”

Select reliable information sources from multiple perspectives.



“The REVIEW”

Synthesize: compare themes, methods, controversies, and conclusions among the authors; make clear how the studies relate to one another and to your thesis/ research question/ purpose.



SQ3R

HOW TO BE AN EFFECTIVE READER!

READ

Read the whole text quickly.
Don't stop. Even if there is something difficult that you don't understand.

RECALL

Look back at your query questions.

Can you identify which sections help you?

SURVEY

Scan the text and identify its structure.

Do you need to read this text?

QUERY

Ask yourself about each section.

What do you expect to discover?

REVIEW

Read important sections again slowly.
Remember why you are reading.

Take notes so that you can remember helpful information and where you

Reading the Material

Miller, M., & Veatch, N. (2011). *Literacy in context (LinC): Choosing instructional strategies to teach reading in content areas for students grades 5-12*. Pearson.

Image Credit Unknown

Plagiarism and Citation Style

- ▶ **plagiarize**-to steal and pass off (the ideas or words of another) as one's own: use (another's production) without crediting the source to commit literary theft: present as new and original an idea or product derived from an existing source

盗作（とうさく、英:plagiarism）は、他人の作品の全部または一部を、そのまま、自分のものとして、無断で使う行為[1]。また、そうした行為によってできた作品[1]。剽窃（ひょうせつ）とも呼ばれる（俗語では「パクリ」や「パクリの一種」とも）。オマージュ、パロディとは区別される。

<https://ja.wikipedia.org/wiki/%E7%9B%97%E4%BD%9C>
<https://www.merriam-webster.com/dictionary/plagiarize>

In Text Citation

IEEE use square brackets[1]

Rather than as superscripts¹....

Or in bracketed form (Jones 98).....



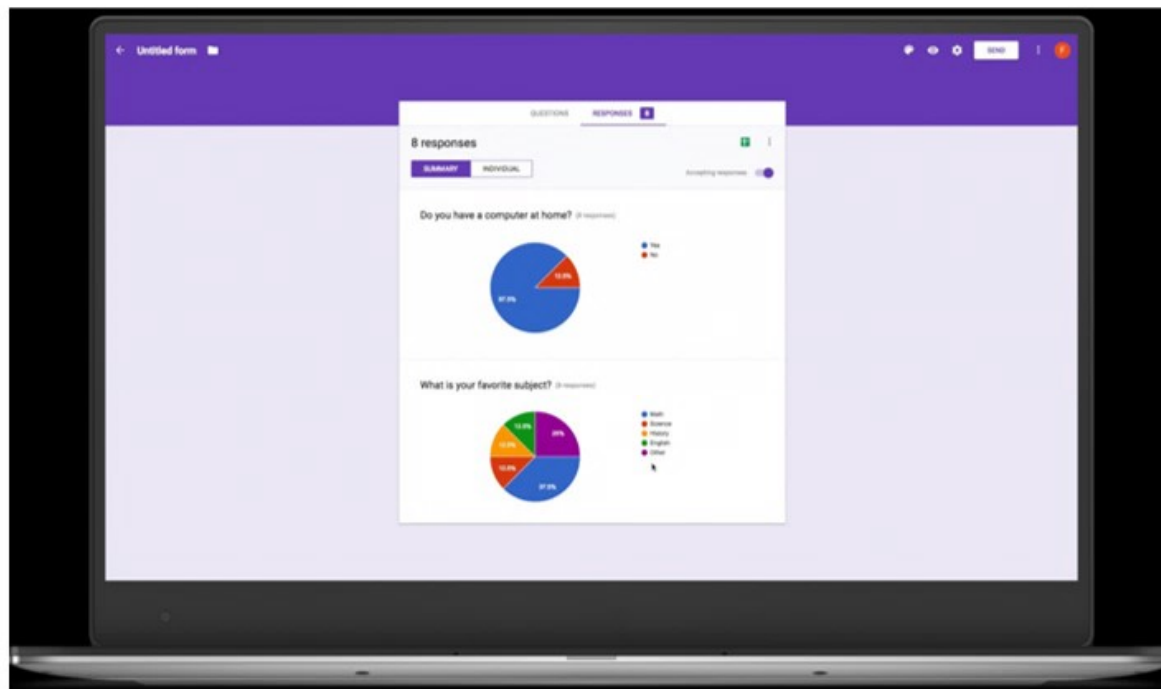
Methods and Results

- ▶ Taking A Who, Where, What and How approach to the methods section makes it fairly easy for students to grasp.
- ▶ Building off procedural language learned in 1st year Academic English Classes.
- ▶ As material and procedures are universal among all groups this section presents little difficulty.

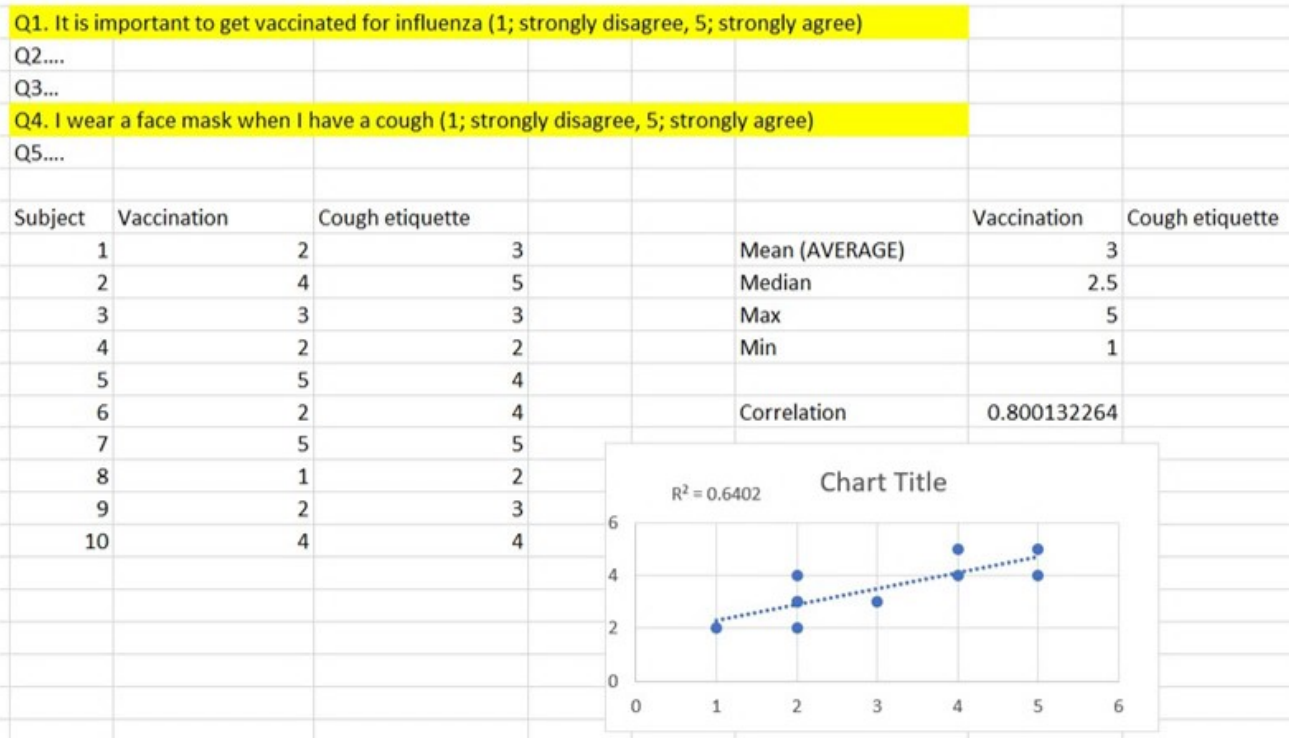
Participants

20 male and 20 female participants from Tokyo University participated in the current study. They were between 23-25 years old with a mean age of 23.9.

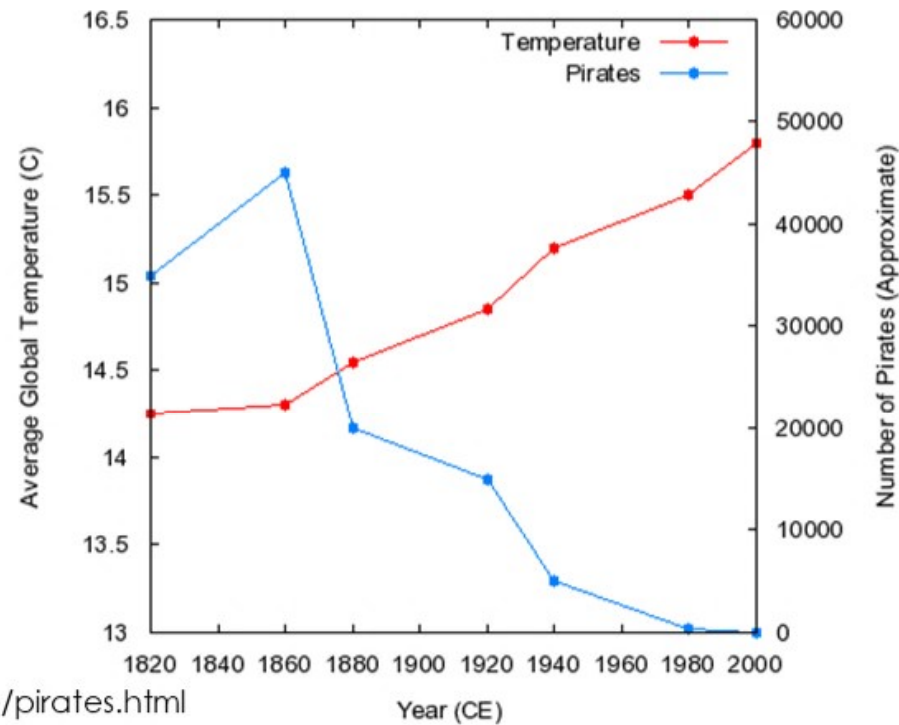
Results Section – Where They Tend to Shine



Results Section – Where they tend to Shine





Correlation \neq Causation



<https://sparrowism.soc.srcf.net/home/pirates.html>

Discussion and Conclusion

 Results	Results vs. Discussion	 Discussion
✓ Include experimental data, but not the interpretation		✓ Explain any surprising, unexpected, or inconclusive result(s)
✓ Incorporate statistical analyses where applicable		✓ List all the major findings of your study
✓ Follow sequential organization when presenting data		✓ Interpret and explain the findings effectively
✓ Include texts, figures, and tables		✓ Mention limitation if any
✓ Avoid speculations		✓ Relate to what others have done

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Discussion Sections can be Daunting...

Discussion section:

- (a) Try to explain "What do your results mean?"
- (b) how they relate to existing research

Conclusions section:

- (a) Summarize your paper.
- (b) What do you want readers to remember?



Other Important Elements of the Project

- ▶ Student Peer- Review
- ▶ Student and Teacher: one-on-one editing
- ▶ Presentation of findings.
(1st Semester was focused on teaching presentation skills)



Limitations

- ▶ Time and labor intensive.
- ▶ Requires relatively motivated, independent students.
- ▶ Students need at least a basic level of Academic English skills.
- ▶ The momentum of the project may leave some students behind.



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Basic Plan	Details	Major Component Due
1. Introduction to Questionnaires	Choosing Groups/Topics.	Groups and topics.
2. Project and Survey Introductions	Introduction to the project. How to write survey questions.	First draft of questions.
3. Correcting Surveys	Checking survey Questions Good vs Bad Questions	Second draft of questions
4. Survey (Cont.)	Google Forms How-to Teacher Question Check	Google Forms Due
5. Research	Introduction to Research Introduction to SQ3R	Questionnaires approved by instructor; data collection can begin.
6. Literature Review Introduction	What is a Literature Review?	SQ3R Due
7. Literature Review (Cont.)	Literature Review Cont., Citations / IEEE	SQ3R Cont.

Basic Plan	Details	Major Component Due
8. Methods and Results	Introduction to Methods and Results Sections	Literature Review Draft Due next class
9. Methods and Results (Cont.)	Putting Sections together w/ Headers	Methods and Results Draft Due Next Class
10. Discussion and Conclusion	Introduction to Discussing and Conclusion sections	
11. Discussion and Conclusion	Discussing and Conclusion (Cont)	Discussion and Conclusion Draft Due Next Class
12. Peer Editing	Students Work in groups and pairs to edit and review papers	Draft 1 Due
13. One – on –One editing	While students work independently, the T reviews their papers one-on - one	Draft 2 Due Students work to finish the paper and practice their presentations
14. One – on –One editing (Cont.)	(Above Cont.)	Students work to finish the paper and practice their presentations
15. Presentations		Final Draft Due