The following handout is a supplement to this publication:

Li, R. (n.d.). Teaching Disciplinary Writing Using Google Ngrams. *A Digital Project Handbook*. Retrieved from <https://handbook.pubpub.org/pub/assignment-googlengrams>

Google Ngrams Activity Sheet

Taking Screenshots:

PC: command shift 4

Mac: option command 4

Google Ngrams (which analyzes a large corpus of books) charts the frequencies of words/phrases appearing in books across a span of time.

1. Enter in specific words/phrases, preferably related to your discipline, into Google Ngrams: <https://books.google.com/ngrams>.
2. Adjust the year ranges and language corpuses as needed.
3. Take screenshots of the graphs and insert the images into the Google Doc.
4. In your group, discuss patterns you notice in the frequencies of words/phrases over time. Are any patterns surprising to you?

Example words/phrases:

- Disney article: “fairy tale,” “Snow White,” “Disney,” “Great Depression”
- Snapchat article: “Snapchat,” “social media platform”
- Amazon rainforest article: “Amazon rainforest,” “climate change,” “biomass”

Group 1: Student 1, Student 2, Student 3

Group 2: Student 4, Student 5, Student 6

- ★ “Feminist theatre” has extremely rarely been present in literature, even today
- ★ The phrase “feminist” is currently far higher than “theatre”
- ★ “Feminist” is much higher than “feminism” (Why is that?)
- ★ “Feminist theatre” and “strong female character” are nearly obsolete in comparison to the other three

- General rise
- Marketing and advertising mirror each other pretty well.
- Health= huge incline

- Not very common, recently introduced.
- Both the idea of business marketing and a specific marketing plan are fairly new and have increased.
- The phrase “marketing plan” was introduced before “business marketing” and began to increase at a higher rate when “business marketing” was introduced.

Student 7: Usage of heuristics and biases rise as Daniel Khaneman and Amos Tversky begin to popularize the field of decision-making with a focus on how heuristics are relevant to decision-making and how they can be impacted by biases.

The conversation of and around religion has drastically decreased since the 1800s
 Conflict however has risen as world conflict has
 God has pretty been constant with spikes during WWI and WWII

Student 8:

The curves of 'Narrative' and 'discourse' follow each other. Highest numbers around 1998. The use of the word 'genre' has been pretty consistent.

The term 'Discourse' became more common when postmodernism as a genre became popular within literature, and it refers to a set of principles that governs how a story is told. Therefore, it is understandable why 'narrative' follow the same curve as 'discourse'.

Group 4: Student 10, Student 11, Student 12

Student 10:

- There does not seem to be any mention of psychology in literature until the late 1800's, which makes sense because that is when this social science received recognition. The concept of experiments and research seem to be prevalent in the last 200 years, but the concept of psychology experiments and research is fairly new in comparison.

Student 11:

This was generally underwhelming information because it was expected... except for the fact that "musical theatre" appeared in books dating back to 1764 when I was taught that the concept of "musical theatre" didn't come about until the 1920s.

- Microphone was invented in late 1800s
- Research in mid 20th century
- Jazz became more mainstream in late 1950s
- Vinyl has similar change to microphone, invented around same time

Group 5: Student 13, Student 14, Student 15

Student 13:

- Memo is falling slightly from the 1990s- could have been replaced by emails

Student 14:

Endorsement trend continues to grow, interest in polling spikes in the mid 40s and around 1960, while 'party politics' remains fairly constant.

Student 15:

Group 6: Student 16, Student 17, Student 18

Student 16:

- All terms listed are related to the field of education
- Restorative justice: A relatively new program being implemented in the united states as well as European schools, not a surprising curve being as the program began to come into prominence during the early 2000's
- Zone of proximal development: a theory of learning development, now considered a classic method. Slightly surprising curve in that it did not gain any real recognition until well after the philosopher's death.
- Various education philosophers/psychologists: Piaget is still a famous philosopher for his

theory of development, not surprising curve. Vygotsky, creator of previously mentioned theory, slightly surprising curve as he continues to rise according to this graph. Montessori, still a prominent method for teaching and learning (Montessori schooling), surprising curve in that it has not gained much recognition or prominence.

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Student 17:

Student 17: It's very interesting that the word material development was widely used during 1910-1920. After that it gradually started decreasing. The reason might be the widespread development of education during early 20th century.

Student 18:

Smith: mentions are relatively constant since he wrote the first economic text in 1776

Economics: mentions of the discipline itself did not even register until the mid 1800s and have slowly risen over time and remained roughly constant since the 1940s.

Trade: a fundamental element and term within economics its usage has expanded and declined over the years most notably the increase between 1900 and the 1930s when much of the world was decidedly anti-trade. Total mentions are also much higher.

Group 7: Student 19, Student 20, Student 21

- Student 19 - investment
 - Exponential increase

- Student 19 - Qualitative
 - Exponential increase

Media, arguably the most important term in Communications studies has historically seen the most usage. Even though it consistently dwarves the other terms, it still dips down in usage in 2004. Its popularity makes sense, as Communications is the study of media and its effects on human behavior.

Communications also seems to have a somewhat positive correlation with the usage of 'media'.

Other terms are not nearly as common..

I was surprised to see social media see so little usage, but it makes sense because the search is limited to 2005/2006.

1. Slow increase
2. By the mid- 70s social skills became somewhat popular

3. Nowadays it's a trend in social skills because they are needed for pretty much everything

Student 6: