First-Year Writing versus Expert Writing: Language-based differences in academic argumentation

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Outline

• Why FY writing matters
• Institutional developments in rhetoric composition and linguistics
• Under-explored areas in FY writing studies
• An example of language-level analysis for FY writing research and teaching
FY Writing: why it matters

- Compulsory courses through which hundreds of thousands of non-native and native speakers of English must pass, in U.S. universities and in writing and English for Academic Purposes modules across the world

- Response to expansion in higher education

- Site of perceived and real access to higher education
• How do we approach FY writing research and teaching in ways that are informed by actual writing, are accessible, and are explicit?

• Increased descriptive, language-level analysis of academic writing, which is currently rare in composition studies.
Brief history

• 1800-1890: formation of U.S. English departments at first encompassing philology, rhetoric, literary studies, logic

• 1890-1910: shift from oral rhetoric to written composition; beginning of compulsory writing courses

• 1910 to 1950: greater expansions in higher education, treatment of composition as “remedial” writing

• 1950-1970: linguistic debates in rhetoric composition; rise of Chomskian linguistics

• 1970 to today: formal establishment of rhetoric composition and applied linguistics as largely separate
Consequences in FY writing studies

• Treatment and teaching of FY writing as divorced from longer rhetorical and linguistic tradition (Bartholomae, 1996; Kitzhaber, 1962; Miller, 1991; Purdy, 1986; Connors, 1999; Winterowd, 1999)

• The “erasure of the sentence” and the “erasure of language” in rhetoric composition and FY writing (Peck Macdonald, 2007).

• Favoring ethnographic, qualitative studies of a few texts or students (Beaufort, 2007; Wardle, 2009; Barton & Stygall, 2002)

• Lack of language-level analysis across hundreds or thousands of examples of FY writing (Aull & Lancaster, 2014; Aull, forthcoming).
RECAP

• FY writing matters

• Historically, approaches in rhetoric composition and linguistics have been largely separate

• Today, there is much less descriptive, large-scale analysis of language-level features in FY writing across many texts

• Approaches that describe FY writing and how they are distinct from those in advanced academic writing can
  • offer a complement to more qualitative approaches and
  • help further clarify links between writing expectations and language-level options for achieving them
Language-level, corpus linguistic analysis

- Popular in applied linguistic research: English for Academic Purposes (EAP); exposes formal characteristics as they reflect values of particular discourse communities such as academic disciplines (Swales, 1990; Flowerdew, 1999; Thompson, 1994; Weissberg, 1993)

- Ex: Hyland (2005b): first-person pronouns and foregrounding scientific phenomena versus author reasoning
Corpus linguistics

- Computer-aided, comparative analysis of linguistic features across naturally-produced texts in terms of frequency and patterns
- Salient word frequencies (think word cloud)
- Concordance (words in textual context)
- Concordance plot (distribution of words in and across texts)
- Keyword analysis (salient words compared to other corpora)
- Collocations (words that co-occur; lexical company words keep)
- Clusters (clusters of words that appear frequently; e.g., * to note)
- Lexical trends (how often students use likely, somewhat, certainly)
Selected findings: Linguistic patterns of certainty and scope in first-year versus expert academic writing
<table>
<thead>
<tr>
<th>Corpora</th>
<th>Expert corpus: COCAA</th>
<th>First-year writing corpus: FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short description</td>
<td>Published academic writing from 1990-2013, including general academic essays and balanced examples from 100 peer-reviewed journals selected to cover the range of the Library of Congress classification system.</td>
<td>19,461 evidenced-based argumentative essays written between 2009-2013 by incoming FY students at two 4-year universities in response to 7 similar prompts which require reading and incorporating a source text in the students’ argument, which they are to complete within a week’s time.</td>
</tr>
<tr>
<td>Word tokens</td>
<td>91,066,191</td>
<td>19,082,094</td>
</tr>
</tbody>
</table>
| Analysis | • AntConc software 3.2.4w (for Windows): [http://www.antlab.sci.waseda.ac.jp/software.html](http://www.antlab.sci.waseda.ac.jp/software.html)  
• COCA interface: [http://corpus.byu.edu/coca/](http://corpus.byu.edu/coca/)  
• All figures normalized to 1 million words to make the frequencies comparable across corpora of different sizes. |
<table>
<thead>
<tr>
<th>Search Term</th>
<th>Words</th>
<th>Case</th>
<th>Regexp</th>
<th>Concordance Hits</th>
<th>Search Window Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>might</td>
<td></td>
<td></td>
<td></td>
<td>269</td>
<td>[0]</td>
</tr>
</tbody>
</table>

AntConc Concordance Software
**UM 09:** Read “Most Likely to Succeed” Malcolm Gladwell. Analyze Gladwell's proposal on how to select and retain teachers in the United States, and argue for or against his proposal using evidence from the article.

**UM 10:** Based on evidence from Jerome Groopman’s article “Robots that care” and your own views, write argument in answer to “What role should machines play in our lives?”

**UM 11:** In “Mind vs. Machine,” Brian Christian surveys several perspectives on what it means to be human. Read the article carefully, and pay close attention to the many perspectives it presents on what it means to be human. Then, select one perspective and take a position on it.

**UM 12:** Write an essay in which you both summarize and analyze Jonah Lehrer’s article “Groupthink.” Present your analysis as a persuasive essay, using evidence from the article to support your claims about the information and ideas that Lehrer lays out.

**UM 13:** In his 2012 article “Cheating Upwards,” Robert Kolker Drawing on one or more of these perspectives, write an essay in which you take a position on why students cheat.

**WakeCo 12:** Read Malcolm Gladwell’s article entitled “Small Change: Why the revolution will not be Tweeted.” Analyze Gladwell’s argument about digital media and social revolutions. Then write your own essay in which you support or challenge his argument using evidence from the article.

**WakeCo 13:** Read the informational article from the National Journal entitled "The Scary Truth about How Much Climate Change Is Costing You" and the argumentative piece entitled "Paying for it." Analyze both texts and then write your own essay in which you support and/or challenge Kolbert’s argument for a carbon tax using evidence from the articles.

**Total:** 19,461 essays; 19.1 million words
Focus 1: Argumentative Scope
Defining scope

• Academic writers indicate the *scope* of their arguments by indicating the origin and breadth of claims.
  Whether a claim was based on research or experience and the extent to which it could be applied to many circumstances or people

• Often through phrases beginning with *in this*, *in my*, and *from my*. 
Text-internal and Text-external markers

• Scope markers can indicate that a writer’s claims
  • refer to phenomena or experiences in the world outside the text; create a text-external engagement with a generalized topic; or
  • refer to views articulated in the “world of discourse” and create more of a text-internal engagement with arguments and evidence in the surrounding text

• Examples
  • Text-external; has wide, potentially national or global scope
    In this society, climate change is not a clear priority
  • Text-internal; honed to a specific case (presumably one already noted)
    In this scenario, climate change is not a clear priority
  • Text-internal; honed to particular research;
    In this study, climate change is not a clear priority
### Scope markers: *In this* phrases

<table>
<thead>
<tr>
<th>In this phrases (phrases that delimit claims to the surrounding “world of discourse”):</th>
<th>Expert</th>
<th>FY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text-internal In this</strong> phrases</td>
<td>286.81</td>
<td>181.52</td>
</tr>
</tbody>
</table>

*In this…study, article, paper, essay, section, context, situation, scenario, case, area, way, regard, manner*

| In this phrases (phrases that extend claims to people or time in the world outside the text): | 14.47 | 52.26 |
|---|---|
| **Text-external In this** phrases | | |

*In this society, country, world, day, age, era*
<table>
<thead>
<tr>
<th>Common text-external nouns</th>
<th>COCAA (expert)</th>
<th>Top COCAA 1L-1R collocates*</th>
<th>FY writing</th>
<th>Top FY 1L-1R collocates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>people</td>
<td>992.50</td>
<td>elderly people, young people, indigenous people</td>
<td>4,449.04</td>
<td>people who, people are, many people, other people</td>
</tr>
<tr>
<td>world</td>
<td>851.79</td>
<td>world war, world bank, third world, Arab world</td>
<td>1,383.23</td>
<td>the world, our world, real world, world today, modern world</td>
</tr>
<tr>
<td>society</td>
<td>411.35</td>
<td>civil society, photographic society, astronomical society, democratic society</td>
<td>975.42</td>
<td>our society, modern society, American society, society has</td>
</tr>
<tr>
<td>humans/human beings</td>
<td>93.49</td>
<td>modern humans, between humans and animals</td>
<td>2,031.91</td>
<td>as humans, humans/human beings are, humans have, humans can</td>
</tr>
</tbody>
</table>

* Collocates refer to words that frequently co-occur; here, immediately to the right (1R) or immediately to the left (1L) of the noun.
Patterns in argumentative scope

• FY writers tend to construct arguments that are generalized and text-external

• Expert academic writers tend to construct more honed and text-internal arguments
Focus 2: Level of argumentative certainty
Defining Hedges and Boosters:

• Hedges are words or phrases that express qualification or possibility: they soften claims by suggesting they are not necessarily proven or true in every case.
  • *Malcolm Gladwell’s proposal may resolve the difficulty of hiring effective teachers* includes the hedge *may* to qualify the claim about Gladwell’s proposal.
  • The writer avoids showing full certainty or commitment about whether Gladwell’s proposal will work.

• Boosters do the opposite: they allow little room for doubt or alternative views by expressing certainty or the writer’s full commitment.
  • *Malcolm Gladwell’s proposal clearly resolves the difficulty of hiring effective teachers* uses the booster *clearly* to show commitment and intensify the claim about Gladwell’s proposal.
Hedging and boosting: showing possibility or certainty in academic arguments

- Opening discursive space: “allows information to be presented as an opinion rather than accredited fact” (Hyland 2005)
  - Hedges (e.g., might, likely, sometimes)
  - Show possibility or qualification
  - Contribute to a more measured stance
  - Challenging for developing writers (Gere et al., 2013, Hyland & Milton 1997)

- Close discursive space: aim to express certainty; leave little room for alternative views
  - Boosters (e.g., clearly, obviously, very)
  - Contribute to a more certain, assertive stance
  - Overused by developing FY writers compared to more advanced students and experts (Aull & Lancaster, 2014)
• Experts hone their claims more; experts show less certainty about their claims than FY writers.

• Experts frequently use words that qualify or downplay their claims (hedges), while FY writers use more words that intensify and sometimes overstate their claims (boosters).
Hedges and Boosters in Expert and FY Writing

Axis Title

Hedges  Boosters

Expert  First-Year Students
Steps for study

- Created list of hedges and boosters based on the literature of epistemic modality (e.g., Ädel, 2006; Barton, 1995; Ellis, 2006; Hinkel, 1995; Hyland, 1998, 2005a, 2007; Hyland & Tse, 2004; Li & Wharton, 2012; Mao, 1993; Thompson, 2001; Vande Kopple, 1985, 2002).

- Conduct AntConc analysis of concordance frequencies, contextual use, collocations, and clusters.

- Finalize list that accounts for all recurring resources (words or phrases/lexical items) used for hedging and boosting–or showing more or less certainty and commitment to claims–in corpora.

- (Result in this case: 267 boosters, 276 hedges)

- Determine frequencies, normalize frequencies, and consider comparative patterns; e.g.,
  - Ratio of hedges to boosters
  - Verbs versus adverbs
  - Subcorpora versus whole corpora
<table>
<thead>
<tr>
<th>Example Hedges</th>
<th>COCAA</th>
<th>FY (All)</th>
</tr>
</thead>
<tbody>
<tr>
<td>always</td>
<td>244.2838528</td>
<td>524.4634861</td>
</tr>
<tr>
<td>certain</td>
<td>238.793341</td>
<td>431.7600582</td>
</tr>
<tr>
<td>certainly</td>
<td>103.3424139</td>
<td>111.5166166</td>
</tr>
<tr>
<td>clear</td>
<td>218.5223713</td>
<td>222.8236154</td>
</tr>
<tr>
<td>clearly</td>
<td>172.039698</td>
<td>164.0258505</td>
</tr>
<tr>
<td>conclusively</td>
<td>2.031489381</td>
<td>3.40628763</td>
</tr>
<tr>
<td>decidedly</td>
<td>6.017600978</td>
<td>1.414919477</td>
</tr>
<tr>
<td>definite</td>
<td>10.98102368</td>
<td>14.72564345</td>
</tr>
<tr>
<td>definitely</td>
<td>13.03447511</td>
<td>80.02155708</td>
</tr>
<tr>
<td>incontrovertibly</td>
<td>0.20863945</td>
<td>0.157213275</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example Boosters</th>
<th>COCAA</th>
<th>FY (all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>approximately</td>
<td>113.620652</td>
<td>21.64302755</td>
</tr>
<tr>
<td>broadly</td>
<td>21.4239772</td>
<td>1.624537177</td>
</tr>
<tr>
<td>fairly</td>
<td>39.69640061</td>
<td>33.32921435</td>
</tr>
<tr>
<td>generally</td>
<td>184.6898373</td>
<td>53.60972685</td>
</tr>
<tr>
<td>in general</td>
<td>89.23179844</td>
<td>38.93648783</td>
</tr>
<tr>
<td>for the most part</td>
<td>15.94444639</td>
<td>22.79592491</td>
</tr>
<tr>
<td>in most cases</td>
<td>11.18966313</td>
<td>14.56843017</td>
</tr>
<tr>
<td>in most instances</td>
<td>1.504400244</td>
<td>0.628853101</td>
</tr>
<tr>
<td>largely</td>
<td>111.8527072</td>
<td>33.8532586</td>
</tr>
<tr>
<td>mainly</td>
<td>50.23818335</td>
<td>36.368671</td>
</tr>
<tr>
<td>Norm by 1000000</td>
<td>COCAA</td>
<td>FY</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>Booster Intensifiers</td>
<td>9094.47</td>
<td>14222.04</td>
</tr>
<tr>
<td>Booster Directive Verbs</td>
<td>1244.05</td>
<td>2718.95</td>
</tr>
<tr>
<td>TOTAL Boosters</td>
<td>10338.5</td>
<td>16940.99</td>
</tr>
<tr>
<td>Hedge Approximators</td>
<td>5771.69</td>
<td>5274.19</td>
</tr>
<tr>
<td>Evidential verbs</td>
<td>1826.54</td>
<td>1420.42</td>
</tr>
<tr>
<td>Modal verbs</td>
<td>2104.52</td>
<td>1991.58</td>
</tr>
<tr>
<td>Nominalization</td>
<td>103.38</td>
<td>61.52</td>
</tr>
<tr>
<td>TOTAL Hedges</td>
<td>9806.13</td>
<td>8747.71</td>
</tr>
<tr>
<td>RATIO Hedges: Boosters</td>
<td>0.95</td>
<td>0.52</td>
</tr>
<tr>
<td>Rounded ratio</td>
<td>10:10</td>
<td>5:10</td>
</tr>
</tbody>
</table>
Patterns in certainty and qualification markers

- Hedges and boosters are frequent

- There are many ways to express certainty and qualification as we construct arguments

- Expert academic writers use more hedges and fewer boosters than the writers in any of the seven FY subcorpora

- Expert writers show a close balance between certainty and possibility which the FY writers do not show
Example passages

Hedges or markers of qualification

Boosters of markers of certainty

Topic and text-external scope

Text-internal scope (based on mentioned studies or examples)

Other (meta-level) contributors to cohesion
FY example

- Ever since the dawn of man, the human race has developed as a very social entity. The want and need to communicate with others is as old as the invention of the wheel or the discovery of fire. Without some sort of primal medium of interaction, neither of these tasks would have ever been accomplished. Jump forward some six million years, and humans are still fulfilling that original desire to communicate and share ideas, simply on a much grander scale. With the expansion of the electronic era, people are able to conceive, develop, and share information across the entire globe, incorporating many different points of view and thought processes. Within Jonah Lehrer's article, "Groupthink," human creativity is related to the mental technique of developing ideas known as "brainstorming." Several different variations of the brainstorming process are discussed, revealing their respective flaws and benefits. Worked into these different types of brainstorming techniques are specific criteria that yield the most human creativity.
FY example

- Society has lost the idea that school is a place to learn at one's own level and that success is merely increasing knowledge and understanding. The idea of success has turned to become a competition of who can beat who and the ones who learn a bit slower or struggle a bit more are left in the dust. All students stress about is GPA, letter grades, and college acceptance. The bar has been set too high for many students, but they do not want to disappoint because today's world revolves around money and success. These students that are scared of being left to fend for themselves will do everything and anything to reach today's expectations. Cheating has been an easy way out many times, and cheating occurs more than most teachers think. Studies done by the World Report show that 95 percent of cheaters say that they have never gotten caught. Students assume cheating is a safe and easy way out of the worries of failing in today's society. Cheating is incredibly wrong and a terrible habit to fall into. All cheaters are wrong and definitely should get caught and must deal with the consequences.
FY example

- As humans, we have limits. Those limits exist both physically and intellectually. In today's society, people tend to expect more than one person can give. Enough is no longer enough and the only way to "progress" is to exceed one's capacity by all means. Those who are willing to exceed their limits can be called ambitious. There are also those out there who are naturally gifted with a larger "capacity" than others. They in turn, are the ones that the ambitious turn to for help. These people can be called independents. Although these two groups of people, the ambitious and independents, have different levels of physical or intellectual capacities, they both share one thing in common---a weak sense of morals when a lot is at stake. This is especially the case for young adults who are still in seeking education. Whether it is primary or secondary school or a higher learning institution, students' sense of morals are often blinded by their will to succeed. The most common act of misconduct to not only others, but to the students themselves is cheating.
Conflict, arguments, and debates all can lead to the creation of something so inspired, however, if people were not forced to work on a project until the counterarguments are silenced, then many things that are worth creating may never be created. Osborn's style of brainstorming is one that could, in a sense, be described as juvenile, because its sole purpose is to allow people to speak without having their feelings get hurt. People are encouraged to speak their mind, which is a definite positive of his style, but, people are also encouraged to silence their voices if they challenge what someone is thinking. As humans, we have the unique ability to create change for the better, and without challenging each other’s thoughts and ideas, our society can become stuck in an age so worried about hurting someone's feelings that we stunt our potential to create real and positive changes to our world. Lehrer's main objective is not to hurt the feelings of others, but challenge people in a way that their ideas, that were once underdeveloped, can transform into a stronger and better adapted idea that has the potential to change the world.
• A **majority** of US residents report that advancement of LGB rights, such as the legal recognition of same-sex marriage, clashes with their religious beliefs. **Approximately 85% of individuals in the United States** identify as religious, and **more than half of the US population** in 2003 believed that homosexuality is sinful. Although condemnation of homosexuality has long been a part of many religious doctrines, not all religions hold similar beliefs toward homosexuality. Indeed, a **2011 survey of the US population** showed that about half of religious adherents believe that society should accept homosexuality, highlighting a shift from the results of earlier studies and mirroring the changing attitudes toward same-sex marriage that also exist across **some** religious groups. **In all**, the US public's view of homosexuality is changing and varies as a function of several characteristics, including religious affiliation. **LGB youths** construct their sexual identities within social climates shaped by these religious influences, with **some LGB youths** encountering more threatening climates than others given that religious demography varies widely by geographical region. **Hatzenbuehler, Pachankis, and Wolff, 2012, American Journal of Public Health**
Expert example

• *It is important* to make a distinction between the *teaching of singing and using song*. This distinction *may* help, *to some degree*, alleviate anxieties associated with the modeling of singing and also endorses the use of audio recordings in the classroom. *One idea* for teaching a new song that, through discussion with teachers, *appears* to be successful is to play the new song each day over a week at appropriate times, such as before school, after break, or as tidying up music at the end of the school day. *In this way*, *children* become familiar with the rhythm and melody before focusing on the lyrics and associated text features. Skepticism, fear of detracting from the main curriculum, and wasting time, are closely connected and reflect a lack of understanding of the contribution that the use of song can make to language development, despite a wealth of supporting research. As discussed throughout this article, the use of song text *should be* perceived to be adding value, rather than taking away, but without commitment and belief, change is *unlikely*. Trinick, 2012, *General Music Today*
Some observations

• Two patterns in FY writing distinct from patterns in more advanced academic arguments:

  (1) More far-reaching or overstated claims

  (2) More arguments rooted in the topic and personal experience versus other texts

• FY writers’ claims, in part through text-external scope markers and certainty markers, can seem overstated or aggressive.
Background: Standardized Secondary Writing Prompts

- Students are invited to write topic-based or opinion-based arguments (or narratives) that speak for large groups of people or human beings generally without drawing from source text evidence.
Standardized Secondary Writing Prompts

SAT and ACT tests, English language proficiency tests (IELTS and MELAB), and state-level National Assessment of Educational Progress (NAEP) exam

- Standardized secondary writing assessments often include scope and evidence expectations that do not match college-level writing.
  - NEAP exams: “why it is important for teenagers to have chores?”; “explain the most important qualities demonstrated by the adults you admire”
  - SAT: “Take a position on the extent to which memories hinder or help people in their effort to learn from the past and succeed in the present”
  - IELTS “Tradition and technology are incompatible. Argue in agreement or disagreement”
A disconnect

• Secondary students transitioning into college writing might have the perception that their claims should show little doubt or room for other views
  • Many secondary writers learn that an ideal academic argument shows “confidence with all material which leads to strong, convincing, consistent argument” (Rezaei & Lovorn, 2010, p. 38).

• Analysis of published academic writing suggests that regardless of discipline, expert writers are expected to show caution as well as certainty at times.
What to do?

• “The core problem is that they write like they think and they've been sold a shallow model of thinking” J. Llewellyn

• Consider highlighting rhetorical strategies and features for students that resonate with your writing expectations, rather than starting with the argumentative principles divorced from writing strategies.
Example connections for instruction and assessment: Certainty and Scope

- Consider the level of certainty that you think is appropriate in a given field, genre, and task—what is an appropriate origin and

- Consider having students annotate which of their claims indicate certainty and how many show room for doubt or another view. Discuss the same in their course reading.

- Consider having students:
  - Identify appropriate levels of argumentative scope through assignment descriptions and in students’ reading
  - Articulate ways to avoid making wide-reaching or generalized claims that are not supported.
Example connection: Diplomacy

- Writers can achieve a kind of diplomacy through showing qualification and also through conceding information before countering it. For instance, concessions that precede the countering of information:
  - Gladwell is correct that social media mostly relies on weak ties to initiate action. However, it is also important to note that social media outlets, such as Facebook and Twitter, play a role in developing revolutions after they have been started.
  - Watson (1982: p. 108) shows the consistency of the passage, as does Wedin (1984), though he does not account for the problems that Freudenthal raises.

- FY writers often don’t provide concessions before countering. **Consider having students begin with concessions, or practice concede and counter pairs as they summarize their reading or begin class discussion.**
Example connection: Coherence

- Coherence refers to clarity in the relationship between ideas (or *logos*) in a piece of writing.
  - E.g., showing textual relationships like *consequence* (as a result), *causation* (due to), *contrast* (conversely), *comparison* (similarly, likewise), or *countering* (however, nonetheless).

- Consider how to build FY writers’ awareness of the number of logical relationships that can build cohesion.

- “As students learn about these functions, they might understand better the distinction between old and new information in sentences.” – William Vande Kopple
Example connection: Credibility

• Credibility refers to the believability of the writer and the writer’s presence in an argument, sometimes referred to as the writer’s ethos.

• Writers can highlight their presence by reformulating ideas in their own words to show understanding and emphasis of the material they present.

• Experts use over twice as many reformulation markers as FY writers.

• **Writers can:**
  • Foreground material by using reformulation markers like *especially* or *in particular*
  • Elucidate material via reformulation markers like *in other words* or *put another way*
  • Show a contrast to an existing view through reformulation markers like *in fact* or *actually*. 
In sum

• In teaching:
  • Connect writing expectations with specific written patterns
  • Consider having students regularly annotate said patterns in their reading and writing

• In research:
  • More research needed on how to demystify academic discourse
  • Value of openness to cross-disciplinary methods and conceptualizations
Free Corpus Resources useful for student analysis

- **AntConc**
  - Freeware concordance software developed by Laurence Anthony: [http://www.antlab.sci.waseda.ac.jp/antconc_index.html](http://www.antlab.sci.waseda.ac.jp/antconc_index.html)

- **Corpus of Contemporary American English (COCA)**
  - 450 million word balanced corpus from 1990-present with tools for comparative analysis with COHA, Google Books, BNC, [http://corpus2.byu.edu/coca/](http://corpus2.byu.edu/coca/)

- Another resource:
  - The Michigan Corpus of Upper-level Student Papers (MICUSP) [http://micusp.elicorpora.info](http://micusp.elicorpora.info)
Thank you
aulll@wfu.edu

References and slides available via email

This talk is based on findings forthcoming in First-Year University Writing: A Corpus-Based Study with Implications for Pedagogy (2015, Palgrave)