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Reconceiving a Necessary Evil: Teaching a Transferable FYC Research Paper

Samuel J. Dunn

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of  
Master of Arts

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## ABSTRACT

### Reconceiving a Necessary Evil: Teaching a Transferable FYC Research Paper

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Master of Arts

The place of the research paper in first-year composition (FYC) courses is often debated in composition forums. Many argue that the a-disciplinary nature of FYC doesn't allow instructors to teach the research paper in a way that will be transferable to disciplinary writing tasks, while others say that it is possible, as long as we have a thorough understanding of the kinds of writing tasks students will face in the disciplines and specifically teach writing skills that will be transferable. To identify these more generalizable writing skills to be emphasized, I interviewed 14 professors at Brigham Young University from different disciplines about the research papers they teach within their upper-division disciplinary courses and the kinds of researching and writing skills they expect students to have mastered before enrolling in these courses. I collated the results of the interviews and categorized 22 skills into four categories: writing process knowledge, genre knowledge, rhetorical knowledge, and researching knowledge, finding correlation between the 22 skills I identified with skills identified by both John Bean and Carra Leah Hood, lending credence to the value of my identified skills as worthwhile to be focused on in FYC. I draw on Amy Devitt's idea that the school genres we teach in FYC are antecedent genres to assert that teaching a research paper in FYC outside of the constraints of any one discipline can provide a viable and valuable learning experience, provided that it is taught with an emphasis on these writing skills that are most valued across the disciplines, and provided it is taught as a step along the way to later mastery of disciplinary genres.

Keywords: research paper, research writing, generalizable research writing skills, FYC, genre, antecedent genre, transfer, WAC/WID, composition pedagogy, Amy Devitt, Brigham Young University

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## INTRODUCTION

For some time I have been concerned that my first-year composition (FYC) students aren't getting as much out of the research paper component of course as they might. In fact I once had a student come to my office to go over his research paper, and after we discussed some changes he might make, he said to me as he was leaving, "I guess this paper is just one of those necessary evils that you have to get through your freshman year in college." It was clear to me that I hadn't done my part in helping him, and likely my other students, understand that they were learning skills that would be applicable in later courses and later writing tasks both within the academy and without. The research paper is one of the most ubiquitous genres taught in FYC, but lately one of the most neglected. In 2005 Richard Haswell lamented the lack of replicable, aggregable, and data-supported (RAD) research in composition studies, particularly mentioning the dearth of RAD research on the research paper.

In an effort to better understand how to more effectively approach teaching the "research paper" in the FYC classroom, I have conducted the following empirical study, whose aim was to identify which specific researching and writing skills students should learn in their first year, and how to teach those skills in a way that encourages transfer to subsequent writing assignments also called "research papers" (I use quotation marks around "research paper" because I have learned that it is an unstable genre at best, even though it is one of the most frequently assigned papers in college.). To contextualize this study, I include a brief history of the research paper and its place in FYC, as well as a brief discussion of transfer and of antecedent genres. I claim that the skills I have identified can be transferred from antecedent genres to disciplinary research writing and that teaching the skills with transfer in mind can help teachers make the FYC research paper a more lasting learning experience.

*Brief History of the FYC Research Paper*

The research paper has been a fixture in composition classrooms since the late 19<sup>th</sup> century adoption of the German model of the university in the United States when “writing became the method of discourse and research the hallmark of learning” (Moulton and Holmes 366.) (For a more comprehensive history of the research paper, see David Russell’s *Writing in the Academic Disciplines: A Curricular History*.) Since then, the research paper has become a fixture in the FYC classroom. As shown in Table 1, surveys since 1961 have found that the research paper is alive and well and is and has been one of the most consistently assigned writing tasks in FYC courses across the country for more than 50 years.

Table 1. Surveys Reporting Percentages of Schools Requiring an FYC Research Paper

<b>Survey Year (Surveyor[s])</b>	<b># of Schools Surveyed</b>	<b># of Schools Responding to Survey (percent)</b>	<b>% of Responding Schools Requiring FYC Research Paper</b>
1961 (Manning)	250	171 (68%)	83%
1982 (Ford & Perry)	650	397 (61%)	84.09%
2009 (Hood)	750	166 (22%)	86%

While these surveys report widespread acceptance of teaching the research paper in FYC courses, there is little consensus about how it is to be done. Hood, in addition to replicating the studies performed by Manning and Ford and Perry, asked WPAs to describe the form or genre of the research paper they assign in their FYC courses. She found 24 different kinds of research paper taught, ranging from what Hood calls “traditional research papers” to analysis papers, researched arguments, annotated bibliographies, articles for popular publication, ethnographies, autoethnographies, proposals, and advocacy papers, to name a few.

Hood also asked each WPA to identify the writing and researching skills they had designated as student learning outcomes for their varying genres of FYC research paper. Hood



identified the 22 most commonly mentioned learning outcomes that these 24 genres were targeting, presented in Table 2.

Table 2. Writing Skills Identified by Hood's Survey

<b>Student learning outcome</b>	<b># of responses (out of 166)</b>	<b>Percent</b>
Ability to integrate/synthesize resources	70	42%
Ability to use format/documentation/ citation style	66	40%
Ability to evaluate resources	50	30%
Evidence of critical thinking/reading/ writing	43	26%
Ability to locate a variety of resources	42	25%
Ability to argue a point/solve a problem	39	23%
Ability to use the library (traditional/electronic sources)	33	20%
Evidence of writing process	26	16%
Ability to formulate/use a thesis	25	15%
Attention to audience	24	14%
Information literacy (using the Internet)	23	14%
Ability to design and conduct primary research (observation/survey/interview)	19	11%
Ability to summarize/paraphrase/quote resources	19	11%
Avoidance of plagiarism	14	8%
Ability to conduct secondary research	12	7%
Ability to formulate/use a research question	10	6%
Computer literacy (formatting/presentation tools)	10	6%
Evidence of collaboration/peer review	9	5%
Ability to construct organized and coherent writing	8	5%
Ability to reflect	8	5%
Facility with Standard American English (syntax/grammar/punctuation)	8	5%
Ability to assess multiple points of view/biases	6	4%

Just as there was no consensus about the genre of research paper, there was little consensus among WPAs about which skills students need to learn and master as a result of their FYC research paper. While this lack of consensus is likely due in part to the open-ended nature of Hood's survey (she might have been better served to have given WPAs a specific list of skills to choose from or some other method of narrowing the focus of the survey), it is still telling that across the country, FYC instructors are preparing students very differently, and focusing on a vast array of skills. This variability leads naturally to the question, what are the most important skills to teach FYC students in connection with the research paper?

### *Identifying the Most Important Skills for FYC*

Anne Beaufort has identified “five overlapping yet distinct domains of situated knowledge entailed in all acts of writing: discourse community knowledge, subject matter knowledge, genre knowledge, rhetorical knowledge, and writing process knowledge” (18). (Beaufort views discourse community knowledge as encompassing the other four domains.) It's important for students to understand and master the knowledge of these five domains if they are to become disciplinary insiders. It's clear that in FYC instructors can't teach mastery of *all* these domains; however, we can introduce these domains of writing knowledge to students and get them started down the road. Susan MacDonald's four-stage continuum of student writing, describing the process writers go through to acquire mastery of a discipline-specific genre of writing, can help us understand what the scope of FYC might be in helping students to begin mastering Beaufort's domains. This continuum differentiates student writing in degrees from novice to expert practice as follows:

1. Nonacademic writing
2. Generalized academic writing concerned with stating claims, offering evidence, respecting other's opinions, and learning how to write with authority
3. Novice approximations of particular disciplinary ways of making knowledge

4. Expert, insider prose (187).

Just as we can't expect students to master Beaufort's domain, we can't bring students through the whole continuum and have them leave our FYC classes as disciplinary insiders, but that isn't and can't be our goal. In fact, MacDonald suggests we restrict FYC courses to the first two stages.

To help students master stages one and two and perhaps start moving into stage three, John Bean has defined seven skills he thinks can be gainfully taught in FYC:

1. How to ask discipline-appropriate research questions
2. How to establish a rhetorical context (audience, genre, and purpose)
3. How to find sources
4. Why to find sources
5. How to integrate sources into the paper
6. How to take thoughtful notes
7. How to cite and document sources (229-31)

If we expressly situate the FYC research paper in the second stage of MacDonald's continuum and transparently set goals for teaching students Bean's skills to get them to that level, they will then be better equipped to learn and master their chosen discipline's mode of writing once they arrive in that setting. That is, they will be prepared if we can also teach and motivate them to transfer that learning when the time comes.

*Encouraging Transfer*

A full discussion of transfer would necessitate more space than I have, but because the results of this study have implications for transfer, some brief definitions are needed. Foertsch argues that it is possible to help students transfer learning, and asserts that research in cognitive psychology suggests that "a teaching approach that uses higher-level abstractions and specific examples *in combination* will be more effective in promoting transfer-of-learning than will either method alone" (364, emphasis in original). Because first-year writers don't have time or opportunity to have many context-bound experiences with writing that will allow them to make

their own generalizations about writing, Foertsch states it is both “wise and responsible”(370) to explicitly teach them generic principles as well as strategies for transferring and generalizing their knowledge when faced with new tasks. Doing this will “give students a jumpstart in transferring what they have learned” (370). They can take what Perkins and Salomon call the “high road” to transfer as they “deliberately and mindfully” apply abstract principles to new problems they encounter (qtd. in Foertsch 373). Not teaching explicitly for transfer, however, will force students to take the “low road,” or the slow road. The low road develops students’ expertise in a domain gradually, as they learn to apply principles automatically (Foertsch 373).

The problem with teaching for transfer in this way is that it requires some degree of the much maligned general writing skills instruction (GWSI). Elizabeth Wardle illustrates the problem we face in teaching students generalized skills, as per MacDonald’s stage two, asking, “How can we ensure that students will transfer that general knowledge—at all and in helpful ways?” While there are misgivings in the field concerning this kind of instruction (see, for example, Carter; Downs and Wardle; Freedman; MacDonald; Petraglia; Russell “Activity Theory”; Smit), Wardle allows for the utility of such “mutt genres” saying, “teaching genres out of context is difficult, . . . [though] there may be some value in teaching genre forms if we know what students will be writing later and if we can discern what aspects of what genres to teach about and if we can find methods for helping students apply those lessons elsewhere in meaningful ways (“Mutt Genres” 769). That’s a tall order, but ultimately transfer is what we’re after, and Wardle’s three “ifs” provides us a three-point roadmap for achieving it.

#### *The FYC Research Paper as an Antecedent Genre*

The FYC classroom is an ideal environment to teach students at least some necessary research writing skills, together with strategies for generalizing and transferring those skills. We

need to explicitly teach students that the research paper they learn in their FYC class *is not* going to transfer directly to other research-based writing that they will do in other courses; however, we can draw their attention to the skills they are learning and help them to understand how these skills transfer to their respective fields' writing genres. In other words, the genre may not transfer, but the skills do. To this end the FYC research paper needs to be taught not as a unified and uniform genre, but rather as what Amy Devitt calls an “antecedent genre” – genres of writing that aren't necessarily directly applicable to any rhetorical situation, but that teach a series of skills broadly applicable in many rhetorical situations – emphasizing explicitly that the skills the students are learning as they acquire these antecedent genres are more important than the genres themselves (*Writing Genres* 204). The FYC research paper needs to be seen as the first in a series of writing assignments, a series that will continue outside of FYC classrooms.

If Devitt is right about antecedent genres—and I think she is—then the question becomes, what kind of antecedent research paper genres should we teach in the FYC classroom, and which research writing skills are most important for students to learn in the first year so that they can call on those skills again as they encounter other genres of research paper in succeeding years? This is the question that has driven the research I am reporting here. Bean has identified a list of 7 general skills to focus on, Hood found 22 skills that WPAs at some colleges have identified as important for FYC instructors to teach, but in order to better prepare students for writing in the disciplines, I want to identify the skills that professors in the disciplines think are most important, and then use that knowledge as groundwork for further study into which antecedent genres might most effectively teach those skills. In other words, I want to answer Wardle's question about “what students will be writing later” so as to more effectively “discern what aspects of what genres to teach about,” which will in turn facilitate our “[finding] methods

for helping students apply those lessons elsewhere in meaningful ways.” Through the course of my research, I have found that while disciplinary research paper genres vary widely, there is a series of generalizable skills required by many, and in some cases all, of these disciplinary genres. Instructors would do well to plan their FYC research writing units around these skills, always with an eye to helping students understand that these skills are ones they will practice again and again, and utilize in different ways as they move into disciplinary writing.

## METHODS

I modeled my research design after that of Thaiss and Zawacki as described in *Engaged Writers, Dynamic Disciplines*. For a part of their study, Thaiss and Zawacki conducted interviews with professors from 14 academic disciplines in order to determine what “academic writing” is and whether it has a “standard” form, or whether it has acceptable alternative forms. Similarly, I conducted interviews with professors from 14 disciplines across campus, but rather than ask about academic vs. alternative discourses, I asked the professors about the kinds of writing and research skills they expected students to have mastered and the kinds of writing and researching skills students needed to master in order to successfully complete a research paper in their disciplines.

### *Participants*

With the help of BYU’s WAC/WID coordinator Beth Hedengren, BYU Writing Fellows coordinator Delys Snyder, and BYU Family, Home, and Social Sciences Writing Lab faculty supervisor Joyce Adams, I identified professors across campus whom I could interview. The professors identified came from the fields of anthropology, economics, English, history, mathematical sciences, music, natural sciences, nursing, philosophy, physical sciences, political science, psychology, religion, and sociology. These professors were recommended because they

are dedicated to improving their own writing instruction as demonstrated by their attendance at WAC seminars, their work with composition faculty on writing-related mentoring projects, or their supervision of writing programs within their disciplines. Following are the names of professors interviewed (actual names are used unless use of a pseudonym was requested).

- Steve Adams (pseudonym): Assistant professor of sociology
- Travis Anderson: Chair of the Department of Philosophy
- Brian Cannon: Associate professor of history
- David Crandall: Associate professor of anthropology
- Dennis Cutchins: Associate professor of English
- Richard Gill: Associate professor of biology
- Kirk Hawkins: Associate professor of political science
- Ben Hill: Continuing visiting faculty member in psychology
- Luke Howard: Associate professor of music
- Beth Luthy: Faculty member in the College of Nursing
- Keith Potter (pseudonym): Associate professor of religious education
- Joe Price: Assistant professor of economics
- Jean-Francois Van Huele: Associate professor of physics
- Jill White (pseudonym): Associate professor of mathematics

### *Procedures*

I conducted the interviews in the professors' offices and asked a series of questions (see Appendix) that allowed me to get a better idea of what kinds of writing and researching skills professors across the disciplines were expecting students to have mastered prior to enrolling in upper division coursework, what they were expecting to have to teach their upper division students, and what criteria they used to grade their students' papers. I emailed the list of questions to each of the participating professors ahead of time to allow them time to think through their answers. Upon meeting with the professors, I tried to make the interviews as conversational as possible while sticking to the predetermined list of questions so as to maintain continuity across the 14 interviews. The interviews were recorded with a digital recorder for later transcription. To facilitate analysis of the data, the interviews were not transcribed in their

entirety in most cases, but rather just the parts of the interviews that were salient to my study were transcribed, leaving out the more conversational and irrelevant portions. In analyzing the data I annotated and cross-referenced my transcriptions, looking for patterns and similarities in the professors' responses.

## RESULTS

I found that professors expect students to already have and be ready to acquire a wide range of skills in order to write successfully within the professors' respective disciplines. Of the many skills mentioned in the interviews, I identified 22 that were most commonly repeated. They are listed in Table 3 in order of the frequency with which they were mentioned.

Table 3. Writing Skills Identified by Interviews with Professors

<b>Skill</b>	<b>Number of Professors Who Mentioned Skill (n=14)</b>	<b>Percentage</b>
Writing to Fulfill the Purpose of the Assignment	14	100%
Performing Library/Database Research	14	100%
Editing for Grammar/Mechanics	13	93%
Writing Thesis Statements and Introductions	13	93%
Imitating Genre Conventions through Reading Professional/Student Examples	11	79%
Incorporating Sources (Summary, Paraphrase, Quotation)	10	71%
Knowing the Rhetorical Situation/Context/Academic Conversation	9	64%
Evaluating Sources	9	64%
Organizing/Structuring Writing	9	64%
Learning Reading Strategies	8	64%



Selecting Topics and Defining Research Questions	8	57%
Writing Coherently	8	57%
Writing Clearly	7	50%
Using Style and Diction Effectively	7	50%
Knowing How to Use Citation/Style Guides	7	50%
Overcoming Procrastination/Acquiring General Writing Habits	7	50%
Using Assignment Sheets/Rubrics	6	43%
Addressing Counterarguments	5	36%
Providing Transitions	5	36%
Revising	5	36%
Outlining	4	29%
Learning Peer Review Skills	3	21%

## ANALYSIS AND DISCUSSION

### *Categorizing Skills*

Once I had identified these 22 skills that were most often mentioned, I organized them using a modified version of Anne Beaufort’s conceptual model of the knowledge domains that make up expertise in writing. I’ve altered Beaufort’s model slightly so as to accommodate my discussion of research-based writing (see table 4). I’ve categorized the skills extrapolated from my interviews into the following domains: (1) writing process knowledge, (2) genre knowledge, (3) rhetorical knowledge, and (4) researching knowledge, as illustrated in Table 4. I replaced Beaufort’s domain “subject matter knowledge” with “researching knowledge,” because students generally lack extensive subject matter knowledge, but knowing how to research is a means of getting at subject matter—and a main reason that professors assign research papers. Also, I didn’t categorize any of the skills I identified into the domain “discourse community knowledge”

because it is a domain that encompasses the other four. As Beaufort said, these categories overlap, so they serve mainly to facilitate discussion about these skills, not to draw hard lines.

Table 4. Identified Writing Skills Organized into Beaufort's Domains

<b>Writing Process Knowledge</b>	<b>Genre Knowledge</b>	<b>Rhetorical Knowledge</b>	<b>Researching Knowledge</b>
Overcoming Procrastination/ Acquiring General Writing Habits	Selecting Topics/ Defining Research Questions	Writing to Fulfill the Purpose of the Assignment	Performing Library/ Database Research
Outlining	Writing Thesis Statements and Introductions	Knowing the Rhetorical Situation/ Context/ Academic Conversation	Evaluating Sources
Writing Coherently	Imitating Genre Conventions through Reading Professional/ Student Examples	Addressing Counterarguments	Learning Reading Strategies
Writing Clearly	Organizing/ Structuring Writing		Incorporating Sources (Summary/Paraphrase/ Quotation)
Providing Transitions	Using Appropriate Writing Style and Diction		
Revising	Using Assignment Sheets/Rubrics		
Learning Peer Review Skills			
Editing for Grammar/Mechanics			
Knowing How to Use Citation/Style Guides			

It's important to note that the skills listed in Table 4 aren't necessarily skills that I or the professors I interviewed believe students ought to master entirely in an FYC course. Rather they are a broad collection of skills that professors believe students need to learn, by means of both FYC and discipline-specific writing instruction, in order to successfully complete upper division research-based writing assignments. To better understand each of these skills, I have included a

description and definition of each skill as interpreted from the interviews, as well as quotes from the interviews that represent how the professors talked about each skill.

### Writing Process Knowledge

Of the 22 skills identified in my study, nine of them fall in the category of writing process knowledge. Writing processes are typically represented in the following recurring stages: planning, drafting and revising, editing/polishing, and submitting. I've categorized the nine writing process skills into the first three of these steps.

### Planning:

1. Overcoming Procrastination/Acquiring General Writing Habits: Seven of 14 professors mentioned students' tendency to procrastinate and leave writing their papers until the night before the due date, and the professors that mentioned it also believed it could possibly be addressed in FYC courses. Ben Hill emphasized this need saying, "You've got to tell them how to not procrastinate. Even good people do poor work if they leave it to the last minute." The professors often went beyond saying that students need to learn how to not procrastinate and added that they need to learn that writing isn't something you can successfully do in one sitting. In that sense, planning and not procrastinating tie in to the additional call for students to learn revision strategies (discussed later). But this seemed to go beyond revision, with the professors wanting students to change the way they think about writing. Jean-Francois Van Huele said, in talking about skills that he'd like students to have mastered before entering his classes, "Good writing habits. It's important to write a little bit regularly and not procrastinate. Also, [students need] a good attitude towards writing and curiosity towards writing."

2. Outlining: Four out of 14 professors brought up outlining, the only prewriting or invention strategy that was mentioned. Many of them mentioned the ability to make an outline as kind of an afterthought, something that might be helpful along the way to writing a first draft, though Ben Hill really emphasized that students need to learn outlining strategies, saying, “I’m big into outlines. If [students] do a really pretty good outline, they can turn it into a paper with very little effort.”

### Drafting and Revising

3. Writing Coherently: Eight of 14 interviewees mentioned coherence, usually in reference to the internal coherence of a paragraph. It was often used to mean a paragraph with a strong topic sentence that gives the reader an idea of the controlling idea that will pervade the entire paragraph. In addition, it was used to mean coherence of the paper as a whole, as elucidated and controlled by the “thesis.” (Theses and introductions are discussed in the “Genre Knowledge” section.) Of students’ struggles with coherence Kirk Hawkins explained, “I have some expectation that [students] know how to write a coherent paragraph. I find that it’s less true that they’ve mastered that art than they have sentence level mechanics. Simple things like, what a good topic sentence looks like, and how the sentences fall, they struggle with that.”
4. Writing Clearly: Seven of 14 professors mentioned clarity, particularly science and social science professors who said that students struggle to articulate precisely what they mean. Several professors said that in one-on-one or group conferences students would often be able to say verbally what they meant, but they struggled to put it in writing. Additionally, clarity was mentioned in conjunction with students’ ability to “write descriptively” in what several professors called the “technical writing” portions of their papers. Of

students' need for better clarity in their writing Jill White said, "[It's] really hard because then you have to sit there and go through the sentence and say, 'This doesn't make sense; what did you really mean? How do you change this sentence to say what you really mean?' And that's a skill that takes a lot more of my time to help them develop. But they need to know it."

5. Providing Transitions: Five of 14 professors mentioned this skill, distinguishing the use of transitions from the idea of general coherence. When talking about coherence they were usually talking about content and having a controlling idea throughout a paragraph or general flow of content throughout a paper, whereas in talking about transitions and transitional phrases they seemed to be more concerned more with how transitions are used to lead the reader from sentence to sentence, idea to idea, and paragraph to paragraph. Beth Luthy described this problem saying, "[Students are] missing some of that finesse and sophistication. How do you tie this story together using an easy transition or transitional phrase...? They're not great at doing that. In fact what I tell them is, 'You're giving me a list. You're half a step from an outline. How do you weave that into a story?'" Transitions might be seen as a strategy used to achieve coherence (discussed previously), but because they were mentioned explicitly by five professors I felt it important to mention them separately.
6. Revising: Five out of 14 professors discussed the need for students to learn revision strategies, often talking very concretely about how students simply don't revise. Richard Gill said of this problem, "[Students are] beginning at word one and going through to the last word and assuming everything that they've written is beautifully constructed." In recognizing that students don't revise, the professors who brought up revision recognized

how valuable a skill it is. Joe Price emphasized the need for this skill saying, “The most important thing I think is just a willingness to revise, revise, revise. The best papers I see have been through several iterations....The worst conversation to have [is] when someone [brings] their paper in and...it’s like they came in and didn’t even know they were bringing in garbage.”

7. Learning Peer Review Skills: With only three out of 14 professors mentioning it, peer review wasn’t discussed as often as I thought it would be. Of those that mentioned peer review, two of them dedicate class time to peer review and the other expects it to be done outside of class. Jean-Francois Van Huele described the challenges he’s seen in his class associated with peer review saying, “I find it hard to get them to critique each other’s work....I’m somewhat frustrated by their tendency to just give each other kudos and just think it’s good enough. I find myself being the least satisfied with the writing in the class,...[but] if it [comes] from me it just sounds like I’m being [a] critical advisor and I’m looking at small things.”

#### Editing/Polishing:

8. Editing for Grammar/Mechanics: This was identified in 13 of 14 interviews. In particular, when asked what writing skills students struggle with most and which skills professors would like to see most emphasized in FYC, professors often mentioned grammar and mechanics first. In talking about these skills they were referring to such basic skills as subject-verb agreement, comma usage, and “sentence-level mechanics” (a phrase used by several professors that seemed to mean the ability to write a good sentence by avoiding comma splices, run on sentences, etc.). While they wanted grammar and mechanics taught, many of these professors recognized the difficulty of teaching grammar and

mechanics. Of this difficulty Brian Cannon said, “Everybody wants students that can write grammatically correct sentences but nobody wants to teach grammar.”

Interestingly, Keith Potter and Joe Price both expressly said that they don’t grade the grammar aspect of their students’ writing; however, it was clear in talking about their grading practices that they are both influenced by how well students employ these skills. In Potter’s words, “The run-on sentences, the sentence structure, the word use [was] just horrid...[I] cleaned them up and probably took on too much trying to fix them.” And in Price’s words, “I’m not grading them on their writing, but their writing is going to distract me from what I am grading them on.” So while neither consciously focuses on or grades grammar and writing mechanics, they both notice and are distracted by ineffective, incorrect sentences.

9. Knowing How to Use Citation/Style Guides: Mentioned by 7 of 14, this skill obviously would fit well within the Genre Knowledge category because each discipline does it differently; however, when professors talked about students’ ability to cite sources and use style guides appropriately, they usually acknowledged that it wasn’t possible for students to learn all they needed to know about APA or Chicago or other various style guides in FYC. Rather, they said that students need to learn what Dennis Cutchins called “the basics of citation.” Cutchins summed this point up nicely, saying:

I don’t expect someone who hasn’t spent a lot of time with literature to know MLA; it’s not intuitive. I don’t know it. I have to look it up every time. But I do expect them to know the basics, which is, “I ought to put some note here that says I got this from somewhere,” and the basics of, “here’s the name of the book,

here's the name of the author, here's the page I found it on."...[Students] have to at least say, "It's important for me to attribute."

Cutchins' comment suggests that the desired knowledge is not so much how to use a particular style guide, but knowing when a sentence or paragraph must be cited and what basic elements must be part of any citation.

### Genre Knowledge

Of the 22 skills found, I categorized six as genre knowledge skills. Many of these skills are generalizable despite the fact that they will vary by the genre. Their dependence on the genre is what led to this classification. Many of these skills weren't mentioned specifically by professors, but rather are skills that I'm extrapolating from the descriptions professors gave of their assignments and of the ways in which they teach their assignments.

1. Selecting Topics/Defining Research Questions: Eight of the 14 professors said that they saw students struggling with the ability to pick topics as well as write research questions to guide them as they went about performing their research. I include this skill under genre knowledge because, while it is the guiding factor in the students' research and might easily be categorized there, the topic or research question often stems from the kinds of questions and topics that are being debated by members in a discourse community, which allows us to see the research question as a product of that discourse community. As such, it has its place in a distinct, disciplinary genre. In most of the interviews the professors said they took it upon themselves to teach their students how to go about defining a worthwhile focus. Joe Price related how he does this by saying he tells his students, "The most important criteria we use to judge your paper will be whether or not you come up with an interesting idea that relates to the principles of the



course.’...I teach them about ‘how to make your ideas interesting,’ and ‘where do you get interesting ideas.’”

2. Writing Thesis Statements and Introductions: This is a skill that was mentioned specifically by 13 out of the 14 professors. Of the 13 professors that mentioned this skill, they all talked about the need for students to be introduced to how to write an introduction, but only 10 of them mentioned that students needed to learn how to write a “thesis.” I put “thesis” in quotation marks because not all of the professors used the word “thesis.” Seven of them called it a “thesis,” three called it a “hypothesis,” and two called it an “objective statement” or a “statement of purpose.” (Several professors used multiple terms in describing the kind of “thesis” their writing genres call for.) I lump thesis writing and introduction writing into the same skill set because the professors that talked about these skills usually referred to them together as a single writing skill that they would like students to have a working knowledge of coming out of FYC.

Even the professors that didn’t mention “thesis” specifically explained that their introductory paragraphs serve much the same function of a traditional thesis statement. That is, they introduce the general thrust of the paper and forecast its major focus. For example, Jill White explained that in a mathematics introduction the student is supposed to “write an introduction which [motivates] why the paper is important, why it’s interesting, and where it fits into the research as a large body.” I include the ability to write theses and introductions under genre knowledge rather than general writing process skills because while the professors’ explanations of the function of an introduction seemed pretty standard across the disciplines – it should introduce the topic, explain where the paper fits into the surrounding conversation on the topic and forecast the rest of

the paper – many professors made mention of the fact that introductions in their discipline are different from introductions in other fields. Interestingly, eight professors used the words “argue” or “argument” in describing the function of their thesis/introduction, where several of the others made it clear that their introduction is, in the words of Beth Luthy, an attempt to “try and lay out some facts and suggest justification and rationale..., but [it’s] not going to try and convince you that my way is the right way.” Professors recognize that their genres of writing required introductions that differ from others and make conscious efforts to make the distinction. Kirk Hawkins describes this effort saying, “I don’t always know what are the genres being taught elsewhere and how mine is different from that, and [the students are] not going to get it unless I say, ‘In this kind of paper the introduction should say this, and then you say this, and then explain this in this paragraph, etc.’”

3. Imitating Genre Conventions through Reading Professional/Student Examples: Eleven of the 14 professors provide for their students some kind of example of the genre of writing required in their respective courses. Eight of those 11 provide examples of professional writing – either articles found in peer-reviewed journals or examples of their own writing – and four of them provide examples of past student writing, with some providing examples of both acceptable and poor writing. Additionally, of the 11 professors, only six use these examples to provide direct instruction in the genre of writing itself, where the other five provide the sample papers and leave the students to their own devices to figure out the distinct moves in the genre. David Crandall described how he teaches the genre of the anthropology journal article saying, “I often pick out a good journal article, and I have them read [it], not necessarily for the content, but for understanding how an essay is

put together....How much is devoted to this portion of the essay? How much to this part, etc.” Interestingly, Beth Luthy tells her nursing students not to expressly follow the student examples she gives. In her words, “I hate [giving out past examples]. I do it, but I tell them I hate it. There are a million ways of organizing your work. If you give them an example, they all will organize it exactly like that example paper...I want them to work through that creative process, but there’s just so much anxiety without the example.”

4. Organizing/Structuring Writing: Nine of the 14 professors brought up the fact that students need to better learn how to organize their writing. It was one skill that professors seemed to emphasize over and over again. Students need to recognize that there are many ways to organize and structure a paper, and they all depend on the differing genres of writing both across the disciplines and within the disciplines. Three of the nine professors who emphasized this skill expressly noted that students need to be made aware of these differing genres of writing, and two others made it clear that students aren’t aware of these organizational fluctuations among different genres. Of this struggle Richard Gill noted, “There’s a disconnect between what they [the students] think is important and what the discipline thinks is important. So they think that what’s critical is they have to get the methods exactly right or be able to put everything we know about the topic into the introduction....I think students don’t really know what the genre is and what’s of value in a paper.” Professors recognized that structure varied across the disciplines, but at the same time several of them wanted students to have an idea of a generalized structure. Of such a generalized structure Kirk Hawkins said, “I want [students] to recognize that there’s a structure to a paper. An outline, a subject heading, that they should be familiar

with, enough that when I tell them what the outline in this class should be, that's not a foreign concept to them. They can plug in the subject headings that I'm giving them."

5. Using Appropriate Writing Style and Diction: Seven of the 14 professors said the ability to adopt the correct and acceptable writing style, as dictated by the genre, was one of the biggest struggles they saw students facing. Professors used such words as "chatty," "wordy," "literary," and "flowery" to describe how they believed students had learned to write in their FYC classes, and they spoke of correcting those characteristics in favor of "terse," "technical," "descriptive," "non-engaging," and "scientific" writing. In describing this issue Ben Hill mentioned that something his students struggle with is "overcoming the tendency to write in a literary style. They're going stream of consciousness. Academic writing, under psychology, needs to be interesting and engaging, but very structured, and there is a language that psychology has adopted." Jill White made it clear that the words themselves are very important in mathematics, giving the following example: "When do you use the word 'suppose' and when do you use the word 'assume?' In English they have similar meanings, but [not] in mathematics. [If you use 'assume'] you key off the reader that you're going to start a proof by contradiction, where if you use 'suppose' or 'let' all you're doing is establishing your hypothesis." So each genre has a very distinctive style that students need to be aware of to succeed.
6. Using Assignment Sheets/Rubrics: Six out of the 14 professors interviewed mentioned they give their students assignment sheets and rubrics to help explain some of the intricacies of the assignment and some of the genre markers that aren't readily apparent. While not all of the professors who use assignment sheets and rubrics explained to me exactly how they use them, several did mention that they don't explicitly explain them,

but rather leave it up to the students to use if they want. David Crandall explained this saying, “I have a basic grading rubric which is posted [online]. For students who have any kind of savvy will know that that is a good thing to start with when writing an essay. Let us see what the expectations are.” However, it was mentioned that not all students know what to make of these materials. Travis Anderson described this struggle saying:

[Students] receive a paper rubric and in most cases they see that as a rather arbitrary choice on the part of the professor and tackle the assignment with little understanding that the parameters we’ve imposed on them are there to help guide them through what would otherwise be a very demanding labyrinth and research and analysis process that they’re simply not prepared to traverse on their own.

It seems that professors expect rubrics and assignment sheets to help convey expected genre and rhetorical knowledge, but students don’t necessarily understand that they can extract this kind of information from them

### Rhetorical Knowledge

Of the 22 skills identified, three fall into the category of rhetorical knowledge.

1. Writing to Fulfill the Purpose of the Assignment: All 14 of the professors interviewed explained that in order for students to really do their best on “research papers,” they needed to understand the overarching purpose of the assignment. Incidentally, none of the professors could pin down their papers to one specific purpose, because within each of their disciplines they teach a variety of research paper genres that are aimed at teaching the students different skills. This was something I hadn’t anticipated in setting up the study. I went into the first few interviews thinking that I would be able to ask the professors about their respective discipline’s genre of research paper, but

almost without fail I would get the professors asking me questions like, “Do you mean the research paper that I teach in this class or this other class? They’re different.” Steve Adams in sociology mentioned that throughout the several courses he teaches there are five different kinds of research papers that he assigns, each with a different student learning objective. Twelve of the 14 professors mentioned that some of the research papers they assign reflect, to varying degrees, the kind of writing that is published in their discipline’s academic journals; however, that wasn’t always the case. In natural science, political science, and sociology, the professors also assign research papers that reflect the kind of writing done by professionals in nonacademic industries or organizational settings. To that end, several professors recognized that while they know a lot about academic writing, they aren’t qualified or prepared to teach students industry genres. Joe Price described this saying “Those [economics students] who do consulting or investment banking, their writing will be very different. I’m not sure how to prepare them for that stuff. I’ve never done that kind of writing myself.” In other cases, learning the writing genres themselves isn’t the end goal of the assignment. Beth Luthy noted that she gets pushback from her nursing students who claim that they’ll never have to write research papers once they’re nurses. She responds by saying, “You’re not figuring out how to parenthetically cite a three author journal [while you are] standing at the bedside [of a patient], but boy does it force you to pay attention to detail. And...that’s the kind of nurse I want.” The skills learned through writing a research paper go beyond the writing skills acquired. Additionally, many of the professors said that in some courses they assign research papers that are not at all like any professional genres of writing, but rather serve as

- the vehicle through which students solidify their knowledge of the content of the course; in other words, they assign a school genre. There are myriad purposes for which professors assign research papers, and professors want students to be aware of the fact that all good writing has a clear purpose.
2. Knowing the Rhetorical Situation/Context/Academic Conversation: Nine of the 14 professors interviewed mentioned the need for this skill, though none of the professors used the term “rhetorical situation.” These nine usually referred to the fact that students needed to be able to situate their papers in the ongoing conversation about their topics. Three of the nine specifically used the word “conversation” to explain this idea of rhetorical situation, two referred to an intended audience using either the words “audience” and “reader,” two mentioned that students needed to be aware of and cite what the major journals in the field were saying on their topics, and one mentioned that the students needed to be able to fit their paper into an overarching “context.”
  3. Addressing Counterarguments: Five of 14 professors said students need to be able to address counterarguments in their writing. Naturally, the ability to address counterarguments only applies to the genres in which the writer is making an argument (as opposed to merely reporting results or objectively presenting the facts of an issue). The ability to address a counterargument connects to understanding and being able to accurately read a rhetorical situation because the ability to effectively address counterarguments means that the students are aware of their intended audience as well as those who oppose the claim they are putting forward.

## Researching Knowledge

In discussing researching knowledge, I'm referring specifically to library research and not necessarily to discipline-specific field research students may perform to collect the data that makes up a large portion of their papers in many cases. Of the 14 professors interviewed, seven of them said that in at least one of the versions of the research papers they assign, the students will be dealing with some kind of discipline-specific data that they've generated themselves or that has been given to them in a hypothetical context. Dealing with this kind of data is not something that we can likely tackle in FYC. That said, all 14 of the professors said that there is library research involved in at least some portion of their papers. This section comprises four researching skills that I identified from the interview data.

1. Performing Library/Database Research: As mentioned, all 14 professors interviewed said that they employ library/database research to some degree in their research papers. The majority of the disciplines require students to use the library or various databases to find secondary research (which was also referred to as "gray research" by Richard Gill) for a literature review that will contextualize their papers in a larger conversation, though three (sometimes four) of the disciplines (music, history, religion and sometimes English) also require students to work with primary research. All of the professors include some kind of direct instruction about how to go about performing this kind of research within their disciplines, and three professors mentioned they bring in disciplinary librarians to present library research methods to their classes. Though they all teach library research skills expressly in their courses, they anticipate that students come to their courses with a basic knowledge of library research skills. But several professors mentioned that students weren't living up to this expectation. Of this unmet expectation Kirk Hawkins said, "We



used to have a higher expectation that [students] were familiar with the library and how to find sources there. We increasingly don't take that for granted." Luke Howard was so disappointed in his students' ability to perform library research that in his music history class he scrapped his assignment which required students to find secondary sources and now requires students to deal almost entirely with primary sources which he has set aside for them in BYU's Special Collections. In explaining why he did this he explained, "[Students'] inability to work with secondary literature...prompted the change." (These professors' comments may indicate that the current FYC instruction in database use is inadequate; it may also reflect the fact that many first-year students are exempt from FYC and never get this instruction.)

2. Evaluating Sources: Nine of the fourteen professors mentioned students' inability to evaluate the relative quality of the sources they find. They said that students seem to be unable to sort through sources and evaluate which ones will fit best in their papers. Steve Adams explained this saying, "On the same topic you read multiple sources and sort them out. Our students don't learn how to do that...I want students to learn how to handle multiple sources, multiple viewpoints. To sort through the ocean of ideas out there, figure out a conversation...then contribute to it." Keith Potter further explained, "Students struggle in understanding the difference between a primary and a secondary source, or the value of some sources. They have a hard time discriminating sources generally."
3. Learning Reading Strategies: Eight of the 14 professors said that students need to learn effective and strategic reading strategies when approaching an academic text. Several suggested that students' struggles to read the sources they find might explain why they seem to do so poorly at evaluating which potential sources are valuable and which aren't.

Many of the professors, as mentioned earlier, will take the time to go through a professional, academic text with their students and point out how to read the texts effectively and strategically. But even those professors often mentioned they wished their students had greater facility in approaching and handling these more complicated texts. David Crandall summed the issue up nicely saying, “For most undergraduates, reading an academic [text] is almost a form of torture. It’s a very difficult thing, but it’s a skill that has to be learned.”

4. Incorporating Sources (Summary/Paraphrase/Quotation): Ten of the 14 professors talked about students’ ability to incorporate sources found through library and database research into their own writing. This is a skill that could conceivably be listed under writing process knowledge and rhetorical knowledge. I include it under researching knowledge because it is the culmination of the previous three skills listed here. The professors who mentioned this skill largely focused on students’ ability to summarize the articles they found. In discussing this ideal, Ben Hill said students should be able to say, “‘I’ve got all this research from 25 or 30 sources, now I’m going to synthesize it into my words...’ And that’s what a lit review is all about: synthesizing research into your language, but conveying their knowledge and the essence of their ideas.” While this is the ideal, several professors made it clear that students are far from where the professors would like them to be regarding their ability to do this. Kirk Hawkins explained his frustration here:

They’re having to go out and collect a lot of data that other people have already generated, and synthesize that. One of the problems I’ve found is that, for example, when they turn in a one page proposal of the problems they want to

discuss, they don't know how to summarize that in a page [in a way that] as a political scientist I'd expect it to be done.

There are clearly some genre issues to be worked out here, but the ability to accurately summarize is a fairly generalizable skill, provided of course that students understand the content they are summarizing. These professors also recognized that even when students are summarizing well, they're not always able to effectively incorporate those summaries into their own writing. Richard Gill explained this struggle saying, "What they tend to do is put together a laundry list and tend to have a series of [summaries] put together. They don't totally meet our expectations, but what happens is, 'Jones 2004 says this, and Smith 2012 says this' and maybe a little bit of analysis at the end."

### *Implications*

There are several conclusions that can be drawn from looking at this collection of writing skills as a whole. While each of the disciplinary genres of research paper was distinct from the others, there were some skills that were more generalizable. Of the 22 skills identified, 16 were mentioned by at least half of the professors interviewed, as illustrated in Table 5.

Table 5. Identified Writing Skills Mentioned By Half or More Interviewees

<b>Writing Process Knowledge</b>	<b>Genre Knowledge</b>	<b>Rhetorical Knowledge</b>	<b>Researching Knowledge</b>
Overcoming Procrastination/ Acquiring General Writing Habits	Selecting Topics/ Defining Research Questions	Writing to Fulfill the Purpose of the Assignment	Performing Library/ Database Research
Writing Coherently	Writing Thesis Statements and Introductions	Knowing the Rhetorical Situation/Context/ Academic Conversation	Evaluating Sources
Writing Clearly	Imitating Genre Conventions through Reading Professional/ Student Examples		Learning Reading Strategies
Editing for	Organizing/ Structuring		Incorporating Sources

Grammar/Mechanics	Writing	(Summary/Paraphrase/ Quotation)
Knowing How to Use Citation/Style Guides	Using Appropriate Writing Style and Diction	

It's important to note that while these 16 skills are more broadly generalizable, all 22 of the skills identified through my interviews were mentioned by multiple professors. This suggests that for all 22 skills we can ascribe some degree of generalizability across the disciplines. That half or more of the professors mentioned 16 of the 22 skills (73%) suggests that these skills are especially generalizable and can be gainfully focused on in FYC.

The overall generalizability of the skills identified through my interviews is further established when we look at the correlation of the skills I identified with those identified by Hood and Bean, as illustrated in Table 6.

Table 6. Correlation of Bean's, Hood's, and Dunn's Research-based Writing Skills

Bean's Skills	Hood's Skills	Dunn's Skills
How to ask discipline-appropriate research questions	Ability to formulate/use a research question	Selecting Topics and Defining Research Questions
How to establish a rhetorical context (audience, genre, and purpose)	<ul style="list-style-type: none"> <li>- Ability to assess multiple points of view/biases</li> <li>- Ability to formulate/use a thesis</li> <li>- Attention to audience</li> <li>- Ability to argue a point/solve a problem</li> </ul>	<ul style="list-style-type: none"> <li>- Knowing the Rhetorical Situation/Context/Academic Conversation</li> <li>- Writing to Fulfill the Purpose of the Assignment</li> <li>- Addressing Counterarguments</li> <li>- Writing Thesis Statements and Introductions</li> <li>- Imitating Genre Conventions through Reading Professional/Student Examples</li> <li>- Using Assignment Sheets/Rubrics</li> </ul>

How to find sources	<ul style="list-style-type: none"> <li>- Ability to use the library (traditional/electronic sources)</li> <li>- Information literacy (using the Internet)</li> <li>- Ability to conduct secondary research</li> <li>- Ability to locate a variety of resources</li> <li>- Ability to evaluate resources</li> </ul>	<ul style="list-style-type: none"> <li>- Performing Library/Database Research</li> <li>- Evaluating Sources</li> </ul>
Why to find sources	Avoidance of plagiarism	
How to integrate sources into the paper	<ul style="list-style-type: none"> <li>- Ability to summarize/paraphrase/quote resources</li> <li>- Ability to integrate/synthesize resources</li> </ul>	Incorporating Sources (Summary, Paraphrase, Quotation)
How to take thoughtful notes	Evidence of critical thinking/reading/writing	Learning Reading Strategies
How to cite and document sources	<ul style="list-style-type: none"> <li>Ability to use format/documentation/citation style</li> <li>Evidence of writing process</li> </ul>	Knowing How to Use Citation/Style Guides <ul style="list-style-type: none"> <li>- Overcoming Procrastination/ Acquiring General Writing Habits</li> <li>- Outlining</li> <li>- Revising</li> </ul>
	Evidence of collaboration/peer review	Learning Peer Review Skills
	Ability to construct organized and coherent writing	<ul style="list-style-type: none"> <li>- Organizing/Structuring Writing</li> <li>- Providing Transitions</li> <li>- Writing Coherently</li> <li>- Writing Clearly</li> </ul>
	Facility with Standard American English (syntax/grammar/punctuation)	<ul style="list-style-type: none"> <li>- Editing for Grammar/ Mechanics</li> <li>- Using Style and Diction Effectively</li> </ul>
	Ability to reflect	
	Ability to design and conduct primary research (observation/survey/interview)	

Computer literacy (formatting/  
presentation tools)

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The strong correlation of skills across these three sets of skills (identified through varied methods and coming from three distinct sources) is compelling evidence that these skills are in fact generalizable across the curriculum. It's important to note here that Bean lists skills unique to the research paper and doesn't mention writing process skills, though surely Bean sees such skills as important. Table 6 shows that all 22 of the skills I identified find some correlation with one if not both of the sets of skills identified by Bean and Hood. Bean's skills correlated with the others, often serving as overarching terms which both Hood and I divided up into smaller pieces. Additionally, all but three of the skills Hood identified found correlation with the others. While this correlation leads us to view these skills as generalizable, Devitt warns against labeling any skills as generalizable because of how easy it is to overgeneralize to the point of rendering the generalized skills useless ("Transferability" 216). Saying that these skills are generalizable may be to oversimplify them, because the way these skills are approached, taught, and utilized within the disciplines varies widely. So while I say that the ability to write a thesis statement and an introduction is a generalizable skill, the truth is that students will be writing thesis statements and introductions in disciplinary genres that are very different from the thesis statement and introduction they learned for their FYC research paper. Students need to know that this is the case so they can adjust their FYC learning to fit future contexts.

In that sense, many of these skills that I'm calling generalizable aren't traditional writing skills that can be taught explicitly. Rather these are skills that deal with genre awareness and knowing what kinds of things to look for when approaching and learning a new genre of writing. So the question is how can we teach these skills in FYC if they're generalizable, but not too generalizable?

As we move from discussing the categorization and the overall generalizability of these research-based writing skills to discussing which of the skills can be taught productively in FYC, it is most important to remember Devitt's idea of school genres acting as antecedent genres. What we need to do in FYC is to explicitly treat the research paper we assign as a rough approximation or an antecedent to research writing performed in the disciplines. Using the categories of skills listed above, I would claim that all of the writing process knowledge skills can be taught in FYC, as long as teachers emphasize how students will go on to use them again and again in college and after—not always in just the same way as in FYC, but approximately. The rhetorical knowledge skills can be taught in FYC as constraints that students need to think about and address when writing anything from school papers to sermons to letters to the editor to reports for the boss: What is my purpose? What question am I answering? What claim am I making? Disciplinary courses can then fill in the genre gaps concerning form and content. The genre knowledge skills can be taught in FYC as well, as long as both teachers and students understand that an FYC research paper is an antecedent genre and that students are learning some basic moves that they will have to vary when they come to write in the disciplines. They are learning one way to organize, not *the* way to organize; they are learning one way to document, not *the* way to document. They are learning principles that can be applied with variations in almost any new setting. Teaching these generalizable skills through the lens of antecedent genres can facilitate transfer of writing skills from FYC to disciplinary writing tasks as long as teachers take the time to explicitly show students *how* they might apply these general skills later. These are some general principles about how to approach teaching these skills in FYC, and further work needs to be done, perhaps writing program by writing program, to explore the specifics of how to implement them directly into an FYC curriculum.

Although the data analyzed above do imply some generalizability of skills, they also imply that successfully completing an upper division research-based writing assignment requires writing instruction that goes far beyond the reach of FYC. This isn't groundbreaking news by any means, but it bears reiterating. Most of the professors I interviewed recognized that their students weren't prepared to successfully complete their assignments, and many felt students weren't as well-prepared as they ought to have been coming out of FYC, but they also recognized they had to teach more about writing. Nevertheless, the amount of writing instruction that these professors included in their courses varied widely. In order for students to most effectively learn what it means to write in the academy, according to their various disciplines, there needs to be a more coherent connection of writing instruction from the a-disciplinary FYC classroom with its school or "mutt" genres to the content-driven disciplinary classroom. To facilitate this connection, good WAC/WID directors can act as an intermediary or mediator between FYC and professors in the disciplines. They can help FYC directors and instructors see what professors in the disciplines will want students to know—how to read, how to summarize, how to define a question, how to use a database, etc.—and they can help the professors in the disciplines to know what students have learned in FYC and how the professors can build on it. There are a lot of opportunities for WAC/WID directors to bridge the myriad gaps that students and professors fall into by providing a unified vocabulary to be used across the disciplines as well as providing strategies for instructors on both sides that will facilitate more transfer than we are currently getting. Additionally, they can help professors in the disciplines with pedagogical techniques—such as requiring students to complete a research paper in stages so that they must plan and can't procrastinate, or so that they have time for and guidance in revision—that will help professors prevent student misunderstanding and poor performance.



## CONCLUSION

At the outset I mentioned that Wardle had said that “teaching genres out of context is difficult, . . . [though] there may be some value in teaching genre forms if we know what students will be writing later and if we can discern what aspects of what genres to teach about and if we can find methods for helping students apply those lessons elsewhere in meaningful ways (“Mutt Genres” 769). This study, combined with previous research, lays out the first steps to better understanding what students will be writing later and to discerning what aspects of research writing genres FYC instructors can profitably teach. We have to believe that teaching the generalizable skills identified and teaching them with an explicit focus on their transferability should make a difference. No doubt we still need much more understanding of what are the best methods for helping students apply FYC lessons elsewhere in meaningful ways, but the efforts of a WAC/WID director focused in the ways described above can be a good beginning to better define what those best methods might be.

## APPENDIX

The following interview questions were approved by the Institutional Review Board at BYU:

- How would you generally describe the writing you require in your research paper?
- What is the purpose of the research paper you assign? (to generate new knowledge, to collect and report expert information, to persuasively argue a side of an issue, to solidify the learning of concepts taught in class, etc.)
- What kind of research does this assignment require? (library/archival, observations, surveys, personally conducted experiments/studies, field research, etc.)
- What writing/research skills do you expect your students to learn in your course(s)?
- What writing/research skills do you expect your students to have already mastered before they enroll in your course(s)?
- How much direct writing/research instruction do you include over the course of the semester?
- What kinds of writing/research skills are addressed during your direct writing/research instruction?
- What outside help do you recommend to your students in completing this assignment? (i.e. University Writing Center, research librarians, etc.)
- What relationship does this kind of writing have with other courses and expectations of students in your discipline?
- With regard to the freshman composition research paper, what skills do you see as most important for students to learn in order for them to be prepared for the research-based writing they will do in your classes?

## WORKS CITED

- Bean, John C. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. San Francisco: Jossey-Bass, 2011. Print.
- Beaufort, Anne. *College Writing and Beyond: A New Framework for University Writing Instruction*. Logan, UT: Utah State UP, 2007. Print.
- Carter, Duncan. "Critical Thinking for Writers: Transferable Skills or Discipline-Specific Strategies?" *Composition Studies/Freshman English News* 21.1 (1993): 86–93. Print.
- Devitt, Amy J. "Transferability and Genres." *The Locations of Composition*. Ed. Christian R. Weisser and Christopher J. Keller. Albany: State University of New York Press, 2007. 215-27. Print.
- . *Writing Genres*. Carbondale: Southern Illinois UP, 2008. Print.
- Downs, Doug and Elizabeth Wardle. "Teaching about Writing, Righting Misconceptions: (Re)Envisioning 'First Year Composition' as 'Introduction to Writing Studies.'" *College Composition and Communication* 58.4 (2007): 552-84. Print.
- Foertsch, Julie. "Where Cognitive Psychology Applies: How Theories about Memory and Transfer Can Influence Composition Pedagogy." *Written Communication* 12.3 (1995): 360-83. Print.
- Ford, James E., and Dennis R. Perry. "Research Paper Instruction in the Undergraduate Writing Program." *College English* 44.8 (1982): 825-31. *JSTOR*. Web. 15 Dec. 2011.
- Freedman, Aviva. "The What, Where, When, Why, and How of Classroom Genres." *Reconceiving Writing, Rethinking Writing Instruction*. Ed. Joseph Petraglia. Mahwah, NJ: L. Erlbaum Associates, 1995. 121-44. Print.

- Haswell, Richard H. "NCTE/CCCC's Recent War on Scholarship." *Written Communication* 22.2 (2005): 198-223. Print
- Hood, Carra Leah. "Ways of Research: The Status of the Traditional Research Paper Assignment in First-year Writing/Composition Courses." *Composition Forum* 22 (2010): n. pag. Web. 15 Dec. 2011.
- MacDonald, Susan. *Professional Academic Writing in the Humanities and Social Sciences*. Carbondale and Edwardsville: Southern Illinois UP, 1994. Print.
- Manning, Ambrose N. "The Present Status of the Research Paper in Freshman English: A National Survey." *College Composition and Communication* 12.2 (1961): 73-8. *JSTOR*. Web. 15 Dec. 2011.
- Moulton, Margaret R. and Vicki L. Holmes. "The Research Paper: A Historical Perspective." *Teaching English in the Two Year College* 30.4 (2003): n. pag. Web. 5 Dec. 2011.
- Petraglia, Joseph, "Introduction: General Writing Skills Instruction and Its Discontents." *Reconceiving Writing, Rethinking Writing Instruction*. Ed. Joseph Petraglia. Mahwah, NJ: L. Erlbaum Associates, 1995. xi-xvii. Print.
- Russell, David R. "Activity Theory and Its Implications for Writing Instruction." *Reconceiving Writing, Rethinking Writing Instruction*. Ed. Joseph Petraglia. Mahwah, NJ: L. Erlbaum Associates, 1995. 51-77. Print.
- . "Writing and the Ideal of Research: Some Tacit Traditions." *Writing in the Academic Disciplines: A Curricular History*. Carbondale, IL: Southern Illinois UP, 2002. Print.
- Smit, David. *The End of Composition Studies*. Carbondale: Southern Illinois UP, 2004. Print.
- Thaiss, Christopher J., and Terry Myers Zawacki. *Engaged Writers and Dynamic Disciplines: Research on the Academic Writing Life*. Portsmouth, NH: Boynton/Cook, 2006. Print.

Wardle, Elizabeth. "'Mutt Genres' and the Goal of FYC: Can We Help Students Write the Genres of the University?" *College Composition and Communication* 60.4 (2009): 765-89. Print.

---. "Understanding 'Transfer' from FYC: Preliminary Results of a Longitudinal Study." *WPA: Writing Program Administration* 31:1/2 (Fall/Winter 2007): 65-85. Print.