



Cognitive Load, Multimodal Composing and Writing Center Support for Multilingual Writers

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Abstract: Although first-year composition has historically been viewed as a “service course” that carries the institutional expectation of preparing students for the academic writing they will do throughout their college careers, there has been increased emphasis on multimodal and multilingual paradigms that reinvision the work of composition in exciting ways. Though these approaches hold a great deal of promise, I argue that adopting them in the absence of a developed infrastructure of support can actually do more to disadvantage multilingual students than support them. I outline a failed Prezi assignment from a FYC course that I taught to highlight the potential pitfalls of going multimodal with a relatively large multilingual population, a failure that I attribute to a failure to recognize the cognitive demands of the task and limited institutional support services for students that they may have otherwise relied on to complete an assignment.

Keywords: multimodal, multilingual, writing center, access

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Introduction

In recent years, scholars in rhetoric and composition have acknowledged that the field has taken a “multimodal turn” (Palmeri, 2012; Schiavone, 2017; Kitalong and Miner, 2017). This shift toward multimodality in the teaching of writing is, as Schiavone (2017) points out, the result of systematic changes in such as the formation of:

new digital presses, publications dedicated to the intersection of technology and writing, emerging specializations in digital and new media studies, disciplinary attention to digital literacies and teaching with technology—for example the recently updated WPA Outcomes Statement—and increased demand for multimodal textbooks and instructional resources. (p. 358)

Alongside these developments, scholarship on digital humanities and technical communication further emphasizes the value of multimodal communication, providing an impetus for faculty to consider how to “remediate” curricula to offer students an opportunity to engage with multiple semiotic modes of composing (Yancey, 2004). The “multimodal turn” in composition has also coincided with an increased emphasis on translingualism and multilingual writers (Gonzales, 2018; Selfe et al., 2015). Jay Jordan (2012), for example, argues for a reframing of composition to attend to the diverse needs of multilingual writers. Jordan’s work is situated within a broader discourse that rejects the notion that composition should emphasize monolingualism and rigid definitions of “acceptable” language use in the college classroom. Horner, NeCamp, and Donahue (2011) similarly argue that this rejection of a monolingual norm should extend beyond teaching and propose a translingual framework for scholarly publication in composition studies as well.

Taken together, these multimodal and translingual perspectives are suggestive of radical changes to the work of teacher-scholars in composition studies. Whereas earlier work in composition studies emphasized the need for students to become acculturated to academic writing (Bartholomae, 1986), multimodal and translingual approaches encourage genres and communicative styles that push back against the idea that “an academic essay” or “standard English” should continue to be exalted in writing programs. As Siegel (2012) rightly points out, writing programs can easily be confronted with “colliding storylines,” as traditional assumptions about the role of writing courses and accountability conflict with new approaches that welcome multimodality and non-linear presentations of information (p. 675). When it comes to multilingual writers, accountability politics become even more complex, as they are disproportionately placed into developmental courses (Gonzales, 2018) where it is often expected that their writing problems (i.e., grammar, genre-awareness, etc.) will be corrected.

These tensions between research-based innovations in the field of composition studies and institutional expectations for undergraduate writing--particularly insofar as

multilingual students are concerned--have the potential to pose significant challenges to both students and instructors. In the sections below, I describe my own experience with a multimodal assignment that I designed to support a cohort of students who carried the institutional designation of "at-risk," many of whom were also multilingual speakers. Although I attempted to adhere to some established "best practices" for instruction in multimodality that have been put forth by experts in rhetoric and composition/writing studies, I underestimated the cognitive demands of the task at hand. That, coupled with a lack of institutional support available for multimodal composition, led the project I assigned to largely fail.

Identifying the Population

When I began teaching at my institution—a private liberal arts university in the Northeast—faculty in the writing program labored under the assumption that we had few multilingual students on our campus. While I believe this to have been accurate in years past, after a literacy narrative assignment in my Basic Writing course led students to write about topics including speaking Polish with a parent, struggling to learn English after immigrating from Nigeria, learning Patois from grandparents, speaking Italian with their cousins, learning Spanish from their grandmothers, and many others, it became clear to me that my courses included far more multilingual students than I had realized. What's more, students' narratives directly challenged what I had understood about our program: that it catered primarily to native-speakers of English, with a handful of multilingual students scattered throughout our courses.

To determine if the demographics of my classes were unique, I developed a survey that was administered to incoming first-year students in the Fall of 2014, which included questions about language, reading and writing experiences, and experience with technology, all intended to construct an image of our first-year students that was rooted in evidence rather than instructors' experiences in prior years. Surprisingly, the survey results indicated that across all levels of instruction (from our lowest level of basic writing through to our research writing course), significant percentages of students reported

Table 1. *Reported Percentage of Multilingual Students in Fall 2014*

Course	0198	1000	1001	1002
Reported Percentage of Multilingual Students	50% (n= 28)	33.33% (n= 101)	43% (n= 49)	44% (n= 40)

speaking a language other than English at home. While this was not a comprehensive sample of our incoming class, the high percentages that we saw in this smaller sample indicated that there were, in fact, many more multilingual students enrolled in our courses than had previously been known.

In addition to important findings about language, the first-year survey also yielded some important insights into students' experience with technology. Students who placed in our lowest level of basic writing reported far less experience with creating digital texts (i.e., videos, blogs, websites, etc.) than did their peers in higher level courses. Interestingly, however, many students who reported speaking or hearing a language other than English at home also reported more experience with technology, regardless of the level of instruction into which they were placed. Together these findings suggested that, perhaps, our multilingual students would benefit from composing in familiar digital modes while at the same time, their peers who reported less exposure to technology would benefit from a digital project that would allow them to begin to explore the possibilities inherent in composing in digital formats.

Rationale for Multimodality with a Multilingual Population

The results of my survey of first-year students indicated that there were two distinct pedagogical areas that warranted further attention: multilingualism and digital literacy. Specifically, I noted that student responses to the technology questions on the survey indicated that few had experience with *creating* a multimodal text of any kind. According to the NCTE Framework for 21st Century Curriculum and Assessment (2013), the ability to “[m]anage, analyze, and synthesize multiple streams of simultaneous information” and “[c]reate, critique, analyze, and evaluate multimedia texts” are essential literacy skills and should be addressed in composition courses (p. 1). I hoped that by incorporating a multimodal assignment into my courses, students would have the opportunity to begin to develop some of the more complex digital literacy skills with which many students had limited or no prior experience.

Multimodal composing in particular seemed to hold particular promise because of its potential to meet another important goal by allowing students from multilingual backgrounds more opportunity to demonstrate their intellectual abilities through an assignment that extended beyond the confines of a formal academic essay written in Standard English. Specifically, it seemed that multimodal composing could potentially offer multilingual students some relief from the cognitive demands of academic writing in English (Kruger & Doherty, 2016). Although cognitive dimensions of writing have been resisted by many scholars in composition studies over the past few decades, there is substantial research that demonstrates the impact of cognitive processes on writing. Beck (2009) emphasizes the role of cognitive functions that are necessary in writing, including retrieval of information, long-term memory, and metacognition, all of which work in

tandem with an understanding of textual elements and the social contexts within which a text is successfully deployed. Her work further highlights theories on the relationship between tasks and cognitive demands, explaining that the low cognitive demands of narrative (focused on retrieval of memory) vs. analysis (focused on transformation of knowledge and reflection) can account for some of the readiness gaps that first-year college students may exhibit as they compose college-level essays.

That multilingual writers are particularly likely to experience cognitive overload in the process of composing an alphabetic text has also been well-documented (Olson et al., 2015; Maamuujav et al., 2020). Other studies have found correlations between second-language fluency and the cognitive demands of writing in that language, wherein lower levels of fluency indicated more strain on working memory as students worked on writing (Chenoweth & Hayes, 2001). There seemed to be particular exigence for such scaffolding of multimodality in my own local context, as the majority of our multilingual students were Generation 1.5 learners and what Valdes (2005) refers to as circumstantial bilinguals. Students who might be assigned these labels have had some formal schooling in the U.S. and/or may have learned their L1 by ear rather than through formal education. Silva's (1993) research points to a clear distinction in the written work produced by Generation 1.5 students in comparison to both their L1 and L2 peers, suggesting that the needs of this population are distinct from both monolingual and international students who have only recently begun formal study in the U.S. Further research suggests that this distinction is likely due to a lack of advanced literacy skills in *either* the L1 or L2, which leads to not only sentence-level error, but also larger challenges with the rhetorical structures of writing academic essays in English. In both writing studies and TESOL, the different approaches that so-called "skilled" and "unskilled" academic writers adapt for different writing occasions have been well-examined (Perl, 1979; Raimes, 1985; Chenoweth, 1987; Barkaoui, 2007; Ranalli et al., 2018). In this body of scholarship, it is generally accepted that unskilled writers struggle more with global revision and meta-awareness of a text as a whole. For multilingual learners, this is exacerbated further by limited lexical knowledge of English and a challenge to intuitively identify the parts of a text that might not meet the expectation of an assignment.

With fewer demands on students' linguistic resources, multimodal composing can arguably alleviate some of the above concerns, thereby providing more support for multilingual writers who do not yet have fluency in English and/or who have acquired partial academic literacy in either their L1 or L2. Maamuujav, Krishnan, and Collins (2020), provide a framework for using multimodality as a scaffolding step for writing with multilingual students and note the benefit of this approach for easing the cognitive demands that might otherwise stymie those who are writing in a second or other language, such as using infographics to plan writing, which "allows writers to focus on organizing their thoughts more effectively without having to worry about producing texts" (Kellogg, 1998, as cited in Maamuujav et al., 2020, p. 4). By separating the processes of

planning and producing, instructors who use multimodality in this way can support multilingual students' work on complex literacy tasks.

Sample Assignment: Design Thinking with Prezi

In the Spring of 2015, I developed a multimodal Prezi assignment for students in my two sections of first-year composition. The students I was teaching fit the institutional designation of “unskilled” (or, perhaps more accurately put, “inexperienced”) writers, as they were all enrolled in a provisional admissions program that provides supplemental basic skills support during the freshman year. Though the students in this particular program are often highly engaged and well-supported academically, my experience in previous years had been that the shift to analytic writing in the FYC course posed exceptional difficulty for many students. Additionally, about 35% of the students enrolled in my courses self-identified as multilingual. During this particular semester, I was hopeful that a multimodal assignment might lessen the burden of reading and analyzing our common first-year read, James McBride’s *Good Lord Bird*, a long and complex fictional account of John Brown’s journey to Harper’s Ferry, that I expected students to struggle with some challenges. Specifically, *Good Lord Bird* makes use of several dialects of English, which I expected would pose an additional challenge, particularly for those students who spoke languages other than English at home.

The assignment I developed is an artifact of the “colliding storylines” that Siegel (2012) describes between multimodal composing and the deficit discourse that is often associated with the work of students who are asked to enroll into remedial courses and that of students who speak multiple languages (Gonzales, 2018). At this particular moment in my writing program’s history, I was keenly aware that a multimodal project would not be readily accepted as an alternative to one of the three major essay assignments (though multimodal composing was certainly encouraged for low-stakes and scaffolding pieces). In 2015, the writing program on my campus prioritized a single genre in FYC: the thesis-driven academic essays that were composed in alphabetic text. If I wanted to incorporate multimodality into one of my course’s major assignments, I knew that I would have to be careful to mirror the expectations of a print-based essay. At the same time, as I designed my assignment, I was also concerned with adhering to best practices in multimodal pedagogy. Whithaus (2005) rightly argues that “when digital elements are added as an afterthought [to an assignment], they are not fully valued by either students or teachers” (p. 131). To engage students in a rhetorically meaningful task, then, it seemed that a born-digital project that relied on multiple modes to shape its message would be necessary, a position that has been endorsed by many experts in the field of computers and composition (see Ball et al., 2013 for one example).

In order to avoid the perception that a multimodal assignment was inherently less complex or intellectually rigorous (Reid et al., 2016), I felt compelled to create a

multimodal assignment that would clearly reflect the analytic moves that students were expected to make in our FYC course, a decision that ultimately backfired. While it may seem to some that students who are identified as “unskilled” (or inexperienced) would be best served by engaging with assignments and texts of low-complexity, literacy scholars have argued that students best learn about textual complexity by actually engaging with it (Bartholomae & Petrosky, 1986; Holschuh, 2019), and this was the approach I took for the Prezi project with the hopes that students would have ample opportunity to engage with productive struggle through their work on the project. A combination of factors, however, led to more struggle than productivity during the course of this assignment.

The Assignment

To help students to prepare for a multimodal assignment, I assigned *Writer/Designer: A Guide to Making Multimodal Projects* (Ball et al., 2014), and throughout the first half of the semester, we worked through examples of design choices (emphasis, contrast, color, organization, alignment, and proximity) and their rhetorical effects as part of the scaffolding for our first alphabetic rhetorical analysis project. Students were engaged with the content and, though they struggled a bit with some of the elements of design, were generally able to write about how design elements influenced meaning on the websites and images that they analyzed in their first essay for the course.

Following this success, I was hopeful as we worked toward a larger multimodal assignment based on a unit dedicated to our common freshman reading for that year, *The Good Lord Bird* by James McBride. As a result of collaboration between the director of our writing program and a faculty member in graphic design, a class of graphic design students had created poster-sized alternative book covers for *Good Lord Bird* based on themes in the novel, which were displayed in the writing program’s office suite. Modeled after Ulman’s (2013) work on curation with the Digital Archive of Literacy Narratives, as well as a model assignment in *Writer/Designer*, my assignment required students to develop a curated exhibit of the alternate book covers for *Good Lord Bird* that were created by the graphic design students.

Assignment:

Create a digital curation (using Prezi) of THREE of the alternate book covers created by FDU students for *Good Lord Bird*.

How well do the three covers you have selected FORWARD or COUNTER a theme that is present in the novel?

Your curation should include the following:

Part 1:

A brief introduction of 500-750 words that provides some historical context for the novel and for the images you have selected. You should have at least 3 outside sources for this. You MAY also include external media (music, images, video, etc.), as long as you use it ethically and purposefully.

Part 2:

A description of your selected covers and an explanation of why you pulled them together. You should also actually have images of the covers here. (500-750 words. You can break this up into smaller pieces.)

Part 3:

An analysis of how effectively the covers you selected are forwarding or countering a significant theme in the novel. (750-1000 words. You should have at least three quotes from the novel in this section.)

(Additionally, reflection on rhetorical and design choices for this project was part of the final course reflection at the end of the term.)

The written requirements were in place to ensure that I was meeting programmatic and institutional expectations regarding what should be taught in a FYC course, and I hoped that chunking it into short pieces would help students to conceptualize their curated exhibits as a whole comprised of smaller parts, thus allowing more space to engage students with the design thinking we had worked on earlier in the term. Aware that multimodal composing was new to most students, I facilitated a collaborative process for developing a rubric for our assignment. I was pleased when students worked together in class to develop this section of the rubric for the project:

Table 2. *Project Rubric*

	Presentation and Design
Excellent - 4	Prezi can stand on its own. Design details are engaging and purposeful. Organization is visible when zoomed out. Flows nicely/organization is clear.

Satisfactory - 3	Design is purposeful. Logical transition between slides. Organization is clear.
Needs Work - 2	Purpose of design isn't completely clear. Some slides jump around without logical transitions.
Weak - 1	Overall organization is not clear. Design isn't purposeful. Many errors. Slides not logically connected.
Not Demonstrated - 0	
Total Points/ Points Possible	x7 /28

Out of 100 possible points, the students had determined that the design components should count for 28 points, making this a substantial component of the assignment, and one that I expected to feature prominently in their final projects. Additionally, the rubric reflected an understanding of some of the design concepts that we had already discussed, including organization and purposeful use of available rhetorical features. My hope was that these projects could serve as a starting point for conversation about multimodality in the writing program, as they would illustrate the complex analytical work that students would have to engage with in order to successfully produce their Prezis.

Despite students' initial enthusiasm and my sense that they were adequately prepared to move forward, it quickly became clear that there was a substantial gap between students' abilities in identifying examples of rhetorical design and actually being able to create such examples on their own. That, coupled with students' struggles with the advanced literacy skills the project required and a lack of institutional resources that could provide meaningful support, resulted in final projects that were a far cry from what I had initially envisioned.

Project Results

Of the 28 Prezi curated exhibits that I reviewed:

- One made meaningful use of an image that could relate to their theme
- Ten chose a background that included birds for no other purpose than because the title of the book included the word "bird"
- Sixteen chose a background that had a clearly defined image that was unrelated to the themes of their exhibit
- Two followed the structure from the models of curated exhibits we had examined

- Two attempted to follow aspects of the structure from the models of curated exhibits we had examined
- Two included music: one was loosely related to the theme and the other was a song about John Brown that wasn't clearly related to the theme of the project
- One included a video, which was not directly related to the theme of the exhibit

In short, few students were able to make meaningful rhetorical use of design features in order to address the assignment prompt.

Design, Arrangement, and Advanced (Digital) Literacy Skills

One challenge that I had not anticipated was the depth of struggle that students would have with the Prezi interface. A blank Prezi screen requires its user to construct an organizational structure for the text that they wish to compose, and having considered Arola's (2010) argument against teaching rhetorical multimodality with design templates, I encouraged students to work with a blank template and provided several models of curated exhibits as models for design.

What I had failed to consider, however, was how many students would struggle to conceptualize a text that moves beyond a narrative storyline and shift to one that requires more advanced reading skills, such as the ability to envision a text as a network of ideas rather than a linear progression of information. Numerous studies have shown that "This complexity and the demands it puts on readers' processing capacities is a major source of comprehension difficulty" (Rapp et al., 2007, pp. 292-293). The blank canvas that Prezi provides--and that I had encouraged students to work with in lieu of a template--demands that they be able to conceptualize the relationship between the parts and the whole of the text that they were to construct. In short, this step alone *added* more to the cognitive demands of a project that I had intended to be less cognitively demanding than a traditional academic essay. Although students had demonstrated an understanding of how multiple modalities might impact meaning in an earlier rhetorical analysis assignment, when it came to creating their own curated exhibits in Prezi, students struggled to demonstrate a clear link between design choices and the meaning their projects were intended to convey. That 16 out of the 28 students opted to use one of Prezi's built-in templates--most of which included elements that were in no way relevant to the project at hand--is one concrete example of how this difficulty manifested in the final curated exhibit projects. This observation aligns with what Alexander, Powell, and Green (2012) found in their study of fifty first-year writing students' multimodal projects and subsequent reflections, as "students could not predict how readers might interpret their multimodal message, they viewed their print essays as being clearer, more straightforward, and easier to interpret" (p. 18).

Birds and The Good Lord Bird

Abstraction is, of course, a central component of visual communication (Wang & Hsu, 2007), which I had intended to be a significant part of the Prezi curated exhibit assignment. Earlier in the term, students in this class had worked extensively with *Writer/Designer: A Guide to Multimodal Projects* and had done quite well with the different elements of design we had covered to complete a rhetorical analysis of websites for organizations or news articles that focused on disability. This earlier project had been complex and required substantial synthesis and analysis, in addition to some awareness of how design communicates meaning. In these observations and analyses, students were able to apply the grammars of design that *Writer/Designer* introduces in the early chapters and apply them to the examples we were reviewing together in class. This early success with visual rhetoric led me to expect that students would perform equally well when it came to the visual rhetoric of the Prezi curated exhibits, but the results from my classes told a different story.

One of the clearest disconnects I observed between the goals of my assignment and what students ultimately produced was the presence of images of birds in background templates of 10 of the 28 Prezi curated exhibits (additional others had extra images of birds as well). These were literal depictions of the “bird” in the title *Good Lord Bird*, which serves a symbolic purpose in the novel. Research on students learning English as a second language has found that figurative language can lead to extra difficulty for multilingual learners who are attempting to construct coherent texts (Kathpalia & Carmel, 2011). What I had not adequately considered, however, was the extent to which the visual aspects of the Prezi curated exhibit required an understanding of metaphor, symbolism, and other forms of figurative expression. One of the primary goals of the project was to analyze themes that were present in the alternative book covers that students in the graphic design course had completed, and while we had spent substantial time in the first unit of the course analyzing multimodal texts, the websites we had examined were communicating in a more direct and literal way (even with multiple modalities) than these more artistically-driven book covers.

Chandrasegaran (2000) points out that multilingual students might also struggle with identifying the problem that a writing assignment asks, leading to “obliqueness” in their writing. To effectively address a prompt, then, students must be able to not only engage in planning and goal-setting in order to meet the demands of a rhetorical situation, but also:

when a writing task requires restructuring of source information, not only must students have the task schemas and cognitive skills for making appropriate decisions about what information is required for what rhetorical purpose, they must also have the linguistic know-how to select syntactic structures that translate those decisions into visible text. (p. 32)

Skains' (2017) study of digital creative writing similarly found that tacit knowledge of a print genre alone was not sufficient to help a writer to create a born-digital composition that was attuned to the rhetorical possibilities of that space; study of other born-digital pieces was necessary to help the writer to envision how their own work might be adapted to a digital medium. For multilingual students in a FYC program, there is an extra layer of complication in that the tacit knowledge of the rhetorical moves and genre conventions of traditional academic writing may be weak to begin with (Ferris & Hedgcock, 2014). Given that there was substantial written analysis required for the Prezi curated exhibits, it is little wonder in hindsight that students struggled so much with the visual component; it was simply too large of a task to plan and execute effectively in the time that was allotted for the assignment.

Student Support Ecologies

Richard (Dickie) Selfe (2004) argues that “an ensemble, team-driven effort that can help sustain the teaching of literacy in innovative, technology-rich environments” (p. 23) is essential if any large-scale efforts to integrate digital literacies into an English curriculum are to be successful. I would suggest that the same is also true for smaller-scale efforts, such as the Prezi project my students completed. While much of Selfe’s work in this area emphasizes the material technological infrastructures that support digital literacy work, his assertions can certainly be extended to student academic support services as well. Increasingly, colleges and universities are shifting from Writing Centers that emphasize alphabetic text toward multiliteracy centers that provide support for compositions that include visual, aural, moving image, and other modalities (Trimbur, 2000). In these contexts, tutors typically approach multimodal assignments as rhetoricians with the understanding that “[tutors] don’t need to be, say, filmmakers to respond to video in new media compositions. However, ... [w]e can talk about how the text is motivated, how it is purposeful, how it is written to a particular audience” (McKinney, 2016, p. 375). At the same time, it is also important to remember that:

To confront rhetoric as a material practice [Multiliteracies] consultants need...to understand the particular material form that rhetorical compositions can take, as well as the material contexts in which they circulate: a web page that combines photographs, words, and design elements or a chapbook that combines charts, graphs and illustrations. ML consultants need to be sensitized to the affordances and constraints of these material forms. (Sheridan, 2010, p. 83)

Sheridan’s argument for tutoring support that addresses not simply academic writing but rather rhetoric more broadly conceived in order to support students working across a range of modalities and genres was published ten years after Trimbur’s (2000) groundbreaking piece on the need for writing centers to begin to transition to multiliteracy

centers that would function to support student composing across a range of modalities. Both argue clearly that tutor staff education should emphasize digital and multimodal literacies to support work in 21st century classrooms.

In 2015 when I assigned the Prezi curated exhibit, tutoring support staff were able to work exceptionally well with students on print-based essays, but a multimodal assignment (even one that incorporated substantial components of written text like this one) required training that was simply beyond any previous expectation. This challenge became evident to me when students began to seek out extra help for their projects (a component of their provisional-admissions program that is actually a built-in requirement). As I began to receive the customary emails from our tutoring support center to confirm that my students had been in for a session, I noted nearly identical notes that simply said, "We worked on questions for _____ to ask Professor Reid." Because the tutors on campus weren't prepared to work with multimodality, students were unable to rely on any of the support structures that were in place and were instead referred back to me for support on their projects. Students who were the most inexperienced writers, speakers of English, and multimodal composers were especially frustrated that they could not access the support services that they had previously been able to rely on to work on major assignments for their writing courses.

While the above example and analysis reflects outcomes that were germane to all students, regardless of their linguistic backgrounds, it is important to reflect specifically on how these challenges might impact multilingual students in particular. Several studies of writing center interactions have discovered that when aware that a client is a second-language speaker, tutors are more likely to direct the session to focus on sentence-level errors (Rafoth, 2009) and to limit conversation with the student and run a tutor-directed session (Thonus, 2004). Weirick, Davis, and Lawson (2017) additionally found that tutors also limited conversation regarding organization and style/genre with multilingual clients, though tutors' self-perception was that they were attending largely to organizational concerns. These general findings about how sessions with multilingual students might differ from those who are native-speakers of English highlight what should be some pressing concerns for faculty who wish to experiment with multimodal composition assignments. If tutors who work with multilingual students are accustomed (albeit, perhaps, unconsciously) to offering a directive session that emphasizes sentence-level concerns without giving substantial attention to organization and style/genre, it is possible that these students might miss opportunities to develop the rhetorical awareness that a successful multimodal project often demands.

Though it may seem a small inconvenience for students to not have tutoring support for a single multimodal project, taking a programmatic view, I would argue that this is, in fact, a serious problem that can disproportionately impact students who may already be academically marginalized, including multilingual writers. Cheadle (2017) found that in a sampling of 800 writing center exit surveys, ELL students were significantly

more likely to utilize tutoring services throughout their college careers than their monolingual counterparts, a finding that suggests that multilingual writers rely on this support service significantly. Though my campus tutoring center does not track the numbers of multilingual students it serves, my anecdotal experience with my own students bears this out as well. Thus, by creating a multimodal project that our campus tutoring center could not support, I may have unwittingly put this already marginalized population of students at a further academic disadvantage.

Embracing Simplicity in Multimodality

In *Race, Rhetoric, and Technology: Searching for Higher Ground*, Banks (2005) presents a more nuanced understanding of why working with technology is perhaps easier for some and more difficult for others. His taxonomy of access focuses on the materials and exposure that, as work on literacy sponsorship has confirmed (Brandt, 1998), are likely determinants of a person's acquisition of any literacy skill. In terms of technology, Banks presents a taxonomy of access: material access (the tools that are available), functional access (the ability to use the tools that are available), experiential access (using the tools as part of everyday life), critical access (the ability to determine when to use which tools for a defined purpose), and transformative access (the ability to use technology in a way that a community needs to further its own purposes). While it's important to underscore that Banks' project was centered on technology and the African American community and not multilingual writers, his taxonomy of access is, I think, also reflective of the interests of many writing teachers, as the goal of multimodal composing is generally to generate critical awareness of rhetorical modes or to encourage students to engage in social justice-oriented work.

The material, functional, and experiential components serve as the starting point for any multimodal composing assignment in a FYC program. Ferris and Hedgcock (2014) note that while international second-language speakers are often from middle to upper-middle class families, generation 1.5 students and those from immigrant families are more likely to be from working-class communities and are less-likely to have extensive material access to a range of technological tools, facts which suggest that multilingual students may, in some instances, be at a disadvantage when it comes to digital literacy experiences. In such cases, access to a tool followed by instruction toward functional access can take a considerable amount of time and, while I would argue that such is time well spent, limitations imposed by technological knowledge can easily have an impact on a students' final composition. For my own multimodal FYC assignment, I had selected Prezi because it seemed to be the most quickly accessible to all students: Prezi is housed on a free online platform, so students wouldn't need anything other than internet access, and our textbook, *Writer/Designer*, included a sample Prezi assignment as an illustration for how to critically incorporate multiple semiotic modes into a single piece.

As I noted earlier, however, the blank canvas of Prezi was overwhelming and students often defaulted to templates in order to impose a clear (albeit often rhetorically ineffective) structure onto their work. Other more successful attempts of engaging multilingual writers with multimodal compositions have required less abstraction and analysis and enabled students to work more with topics and textual structures that were already familiar to them, such as narrative structures in digital storytelling (Angay-Crowder et al., 2013) or classical arguments (Shin et al., 2020). Although both studies suggest that students were able to successfully compose with multiple modalities and move beyond a linear sequence of ideas, the relative ease of the topics and familiarity of discursive structures that students worked with likely allowed for more cognitive space to focus on design.

In a programmatic context where multimodal composing is not yet readily accepted as equal to an alphabet, print-based essay, assigning a topic that may appear to be “easy” poses risks for instructors, particularly those who are adjuncts or non-tenure-track faculty. Further, as Salvo et al. (2009) reinforce, in order to successfully implement institutional change, it is necessary to foster and maintain a dialogic relationship with other stakeholders to the extent possible. Reiff, Bawarshi, Ballif, and Weisser (2015) likewise signal a need for scholarship in writing program administration to read the complex and interconnected work of writing programs in ecological terms. Their collection, *Ecologies of writing programs: Program profiles in context*, includes a series of locally-focused program profiles that “collectively...reveal the dynamic inter-relationships as well as the complex rhetorical and material conditions that writing programs inhabit—conditions and relationships that are constantly in flux as WPAs negotiate constraint and innovation” (p. 16). Had I not tried to maintain a standard for print-based writing for an assignment that was intended to be multimodal, I can imagine this project having had a very different—and indeed more productive—result.

Conclusion

Though I would argue that it is important for teacher-scholars in composition to advocate for a more inclusive conception of student skills and what could be taught in a FYC course to include multimodality, it is equally important to remember that our students do not experience our classes in a vacuum. The nonlinear structures and abstractions that are foundational to many multimodal composing tasks can impose additional cognitive demands on students, particularly those who are multilingual or who are inexperienced with the discursive structures of the academy. Because students utilize a range of campus resources in order to do so successfully, it is imperative that instructors recognize the cognitive demands of an assignment for students as well as the potential training needs of tutoring staff to whom students may turn for academic support. By taking smaller steps with multimodality instructors can ensure that students get the best of both worlds:

exposure to new modes of comping, as well as the ability to access all of the supports available on campus when they need to. This is, I believe, the most equitable approach to support multilingual students with multimodal composing.

References

- Alexander, K. P., Powell, B., & Green, S. C. (2012). Understanding modal affordances: Student perceptions of potentials and limitations in multimodal composition. *Basic Writing e-Journal*, 10/11(2), 1-37.
- Angay-Crowder, T., Choi, J., & Yi, Y. (2013). Putting multiliteracies into practice: Digital storytelling for multilingual adolescents in a summer program. *TESL Canada Journal* 30(2), 36-45.
- Arola, K. L. (2010). The design of web 2.0: The rise of the template, the fall of design. *Computers and Composition*, 27(1), 4-14.
- Ball, C. E., Bowen, T. S., & Fenn, T. B. (2013). Genre and transfer in a multimodal composition class. In T. Bowen and C. Whithaus (Eds.), *Multimodal literacies and emerging genres* (pp. 15-36). University of Pittsburgh Press.
- Ball, C. E., Sheppard, J., & Arola, K. L. (2014) *Writer/designer: A guide to making multimodal projects*. Macmillan Higher Education.
- Banks, A. (2005). *Race, rhetoric, and technology: Searching for higher ground*. NCTE.
- Barkaoui, K. (2007). Revision in second language writing: What teachers need to know. *TESL Canada Journal*, 28(1), 81-92.
- Bartholomae, D. (1986). Inventing the university. *Journal of Basic Writing* 5(1), 4-22.
- Bartholomae, D., & Petrosky, A. (1986). *Facts, artifacts, counterfactuals: Theory and method for a reading and writing course*. Heinemann.
- Beck, S. (2009). Composition across secondary and post-secondary contexts: cognitive, textual and social dimensions. *Cambridge Journal of Education*, 39(3), 311–327.
- Brandt, D. (1998). Sponsors of Literacy. *College Composition and Communication*, 49(2), 165–185. <https://doi.org/10.2307/35892>
- Chandrasegaran, A. (2000). An analysis of obliqueness in student writing. *RELC Journal* 31(1), 23-44.
- Cheatle, J. (2017). Challenging perceptions: Exploring the relationship between ELL students and writing centers. *Praxis: A writing center journal* 14(3), 21-31.
- Chenoweth, N. A., & Hayes, J. R. (2001). Fluency in Writing: Generating Text in L1 and L2 *Written Communication*, 18(1), 80–98. <https://doi.org/10.1177/0741088301018001004>
- Gonzales, L. (2018). *Sites of translation: What multilinguals can teach us about digital writing and rhetoric*. University of Michigan Press.

- Grutsch-McKinney, J. (2016). "New Media Matters: Tutoring in the Late Age of Print." In L. Fitzgerald and M. Ianetta (Eds.), *The Oxford Guide for Writing Tutors: Practice and Research*, 365-381.
- Ferris, D. & Hedgcock, J. (2014). *Teaching L2 composition*. Routledge.
- Holschuh, J. P. (2019). College reading and studying: The complexity of academic literacy task demands. *Journal of Adolescent and Adult Literacy*, 62(6), 599-604.
- Horner, B., NeCamp, S., & Donahue, C. (2011). Toward a multilingual composition scholarship: From English only to a translingual norm. *College composition and communication*, 63(2), 269-300.
- Jordan, J. (2012). *Redesigning composition for multilingual realities*. NCTE.
- Kathpalia, S. S., & Carmel, H. L. H. (2011). Metaphorical Competence in ESL Student Writing. *RELC Journal*, 42(3), 273–290.
<https://doi.org/10.1177/0033688211419379>
- Kitalong, K. S., & Miner, R. L. (2017). Multimodal composition pedagogy designed to enhance authors' personal agency: Lessons from non-academic and academic composing environments. *Computers and Composition*, 46, 39–55
<https://doi.org/10.1016/j.compcom.2017.09.007>
- Kruger, J. L., & Doherty, S. (2016). Measuring cognitive load in the presence of educational video: Towards a multimodal methodology. *Australasian Journal of Educational Technology*. 32(6), 19-31.
- Maamujav, U., Krishnan, J., & Collins, P. (2020). The utility of infographics in L2 writing classes: A practical strategy to scaffold writing development. *TESOL*, 11(2), 1-13.
- NCTE. (February 2013). NCTE Framework for 21st Century Curriculum and Assessment. Retrieved from
https://cdn.ncte.org/nctefiles/resources/positions/framework_21stcent_curr_assessment.pdf
- Olson, C. B., Scarcella, R., & Matuchniak, T. (2015). *Helping English learners to write: Meeting common core standards, grades 6–12*. Teachers College Press.
- Palmeri, J. (2012). *Remixing composition: A history of multimodal writing pedagogy*. Southern Illinois University Press.
- Perl, S. (1979). The composing processes of unskilled college writers. *Research in the Teaching of English*, 13(4), 317-336.
- Rafoth, B. (2009). Responding online. In S. Bruce & B. Rafoth (Eds.), *ESL writers: A guide for writing center tutors* (pp. 149-160). Boynton/Cook.
- Raimes, A. (1985). What unskilled ESL students do as they write: A classroom study of composing. *TESOL Quarterly*, 19(2), 229-258.
- Rapp, D. N., van den Broek, P., McMaster, K. L., Kendeou, P., & Espin, C. A. (2007). Higher-order comprehension processes for struggling readers: A perspective for research and intervention. *Scientific Studies of Reading*, 11(4), 289-312.

- Ranalli, J., Feng, H., & Chukharev-Hudilainen, E. (2018). Exploring the potential of process-tracing technologies to support assessment for learning of L2 writing. *Assessing Writing* 36, 77-89.
- Reid, G., Snead, R., Pettiway, K., & Simoneaux, B. (2016, March 28). Multimodal communication in the university: Surveying faculty across disciplines. *Across the Disciplines*, 13(1), 1-29.
- Reiff, M. J., Bawarshi, A., Ballif, M., & Weisser, C. (2015). Writing program ecologies: An introduction. In *Ecologies of writing programs: Program profiles in context* (pp. 3–18). Parlor Press.
- Salvo, M. J., Ren, J., Brizee, H. A., & Conard-Salvo, T. S. (2009). Usability research in the writing lab: Sustaining discourse and pedagogy. *Computers and Composition* 26(2), 107-121.
- Selfe, C., Horner, B., & Lockridge, T. (2015). Translinguality, transmodality, and difference: Exploring dispositions and change in language and learning. *Enculturation/Intermezzio*. Retrieved from <http://intermezzo.enculturation.net/01.htm>
- Selfe, R. (2004). *Sustainable computer environments: Cultures of support in English studies and language arts*. Hampton Press.
- Schiavone, A. (2017). Consumption, Production, and Rhetorical Knowledge in Visual and Multimodal Textbooks. *College English; Urbana*, 79(4), 358–380.
- Sheridan, D. (2010) Introduction: Writing centers and the multimodal turn. In D. Sheridan & J. Inman (Eds.), *Multiliteracy centers: Writing center work, new media, and multimodal rhetoric* (pp. 1-16). Hampton.
- Shin, D., Cimasko, T., & Yi, Y. (2020). Development of metalanguage for multimodal composing: A case study of an L2 writer's design of multimedia texts. *Journal of Second Language Writing*, 47, 1-14.
- Siegel, M. (2012). New times for multimodality? Confronting the accountability culture. *Journal of Adolescent and Adult Literacy*, 55(8), 671-680.
- Skains, R. L. (2017). The adaptive process of multimodal composition: How developing tacit knowledge of digital tools affects creative writing. *Computers and Composition* 43, 106-117.
- Silva, T. (1993). Toward an understanding of the distinct nature of L2 writing: The ESL research and its implications. *TESOL Quarterly*, 27, 657-677.
- Thonus, T. (2004). What are the differences?: Tutor interactions with first- and second-language writers. *Journal of Second Language Writing*, 13(3), 227–242. <https://doi.org/10.1016/j.jslw.2004.04.012>
- Trimbur, J. (2000). Multiliteracies, social Futures, and writing Centers. *The Writing Center Journal*, 30(1), 88–91.
- Ulman, L. (2013). Reading the DALN database: Narrative, metadata, and interpretation. In H. L. Ulman, S. L. DeWitt, & C. L. Selfe (Eds.), *Stories that speak to us:*

- Exhibits from the digital archive of literacy narratives.* Computers and Composition Digital Press. <https://ccdigitalpress.org/book/stories/ulman.html>
- Valdes, G. (2005). Bilingualism, heritage learners, and SLA research: Opportunities lost or seized? *Modern Language Journal*, 89(3), 410-426.
- Wang, R. W. Y., & Hsu, C. C. (2007). The method of graphic abstraction in visual metaphor. *Visible language*, 41(3), 266-279.
- Weirick, J., Davis, T., & Lawson, D. (2017). Writer L1/L2 status and asynchronous online writing center feedback: Consultant response patterns. *Learning Assistance Review (TLAR)*, 22(2), 9-38.
- Whithaus, C.(2005). *Teaching and evaluating writing in the age of computers and high-stakes testing.* Lawrence Earlbaum.
- Yancey, K. B. (2004). Made not only in words: Composition in a new key.” *College Composition and Communication*. 56(2), 297-328.