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Low-Tech/Low-Verbal Multimodal Assignments in First-Year Writing: Beyond a "Words-Plus" Model of Multimodality

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Abstract

Multimodal composing challenges the dominance of alphabetic, print, or verbal literacies. However, writing instructors often operate on a "words-plus" model of multimodality that relies on computer technologies for the production of digitally-enhanced written or spoken texts. Because this model is so prevalent in composition and rhetoric, multimodality can be conflated with the use of digital tools. This practice can result in texts that merely supplement the dominant alphabetic mode with oral and non-verbal components. This approach to multimodality is not consistent with the role of nonverbal modes in other disciplines and professions, such as the sciences and architecture, or in other cultures. Furthermore, the New London Group's original definition of multimodality does not presuppose a digital environment. Designing multimodal assignments that strategically constrain both digital technologies and verbal modes shifts the focus from technical skills to rhetorical choices. Based on examples of low-tech, low-verbal multimodal texts from journalism, advertising, and health sciences, this article offers specific pedagogical strategies for increasing students' rhetorical flexibility, experimenting with multimodal arguments, and focusing on reflective, iterative learning.

Keywords

Writing Pedagogy, Multimodal Rhetoric, Multiple Literacies, Cross-cultural Communication, Health Literacy

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Introduction

More than a decade after Kathleen Blake Yancey's (2004) call for a pedagogical approach to teaching composition "made not only in words" (p. 297), first-year writing assignments — even those that use digital technologies — operate on a limited, *words-plus* model of multimodality. First-year writing instruction based solely on traditional, print texts cannot achieve what Jody Shipka (2011) has called "a composition made whole" (p. 149), nor can it adequately prepare students for academic and workplace writing contexts that require multimodal literacies and global rhetorics. Yet, in the United States and in other parts of the world, in first-year writing classes and in language arts education, multimodal composition still tends to privilege verbal modes, whether written or spoken. The conception of what constitutes a text now includes "not only words-plus-images but moving images, with their associated soundtracks, too" (Bearne, 2004, p. 16). While the notion of what the *plus* might entail has expanded, words remain the dominant feature of first-year writing students' multimodal texts.

For example, the re-mediation assignments critiqued by Meredith Zoetewey and Julie Staggers (2003) "subordinate the visual to the verbal," which "subtly supports a pro-verbal bias that undercuts opportunities for multi-modal expression" (Falling section, para. 5). Common digital tools like PowerPoint are "capable of supporting sound and image but [are] often used more as digital mirrors for print text" (Hawisher & Selfe, 2010, p. 58). Students compose a paper in bullet-point format and read their slides aloud. Even Shipka's (2011) radical examples of essays written on unusual materials such as ballet shoes (p. 3) and shirts (p. 63) are words-plus-"object-argument or 3-D texts" (p. 2). The pro-verbal bias is "rhetorically perilous" if it "encourages students to value only verbal representations when their most effective rhetorical strategy might be to use a visual" (Williams, 2001, p. 27). Given students' tendency to rely on the familiar verbal mode of composition, instructors need to adopt pedagogical strategies that actively promote other modalities. By limiting the extent to which the "functional load" (Jewitt, 2006, p. 51) of a text can be borne by verbal modes, a low-verbal approach to multimodal composing shifts students' attention to the rhetorical potential of other modes.

A parallel problem to the pro-verbal bias is the conflation of multimodality with digital technologies. Shipka (2011) argued that "in an attempt to free students from the limits of the page, we [may have limited] them to texts that can be composed, received, and reviewed onscreen"; thus, "pro-verbal becomes pro-digital" (p. 11). This was not always the case. Motivated by concerns about unequal access to and experience with digital technologies, early proponents of multimodal composition highlighted low-tech multimodal assignments (e.g., Selfe, 2004; Wysocki & Lynch, 2007). Daniel Anderson (2008) argued for "low-bridge" assignments that use "entry-level software" (p. 43), though he acknowledged that his music playlist assignment, designed to "bring audio thinking into the composition classroom," mirrored a process that "could have been accomplished using a word processor (or a pencil and a cocktail napkin for that matter)" (p. 48). This fact does not actually diminish the multimodal nature of the assignment, but it does reveal its reliance on the verbal, regardless of the materials and technological tools.

Digital multimodal texts are not inherently better than low-tech multimodal texts. The New London Group's (1996) original definition of multimodality did not presume a digital environment, nor did it privilege verbal modes over visual, gestural, or spatial modes (p. 65). The very definition of modes has expanded to include "colour," "sound effect," "movement," and

"gaze" — indeed, any "organised set of resources for making meaning" that results from "the cultural shaping of a material" (Jewitt, 2006, p. 17). Multimodal scholars have demonstrated that

- "print-based reading and writing are and always have been multimodal" (Jewitt, 2006, p. 107);
- "label[ing] a text multimodal or monomodal based on its final appearance alone masks the fundamentally multimodal aspects of all communicative practice" (Shipka, 2011, p. 52);
- the assumption "that *multimodal* has to be digital . . . is not true, except in the case of webtexts" (Ball, 2012, p. 6); and
- "textual practices are never limited to a single mode of print or screen text" (Dressman, McCarthey, & Prior, 2012, p. 5).

Yet writing instructors' teaching practices suggest that we still view written texts, printed on paper or displayed on screen, as monomodal, and that we regard multimodal assignments as those that require the production of digitally-enhanced, words-plus texts.

The risk that this limited conception of multimodality poses for students is that not all academic disciplines, not all professions, and not all cultures privilege the verbal. Teaching multimodal composition in a way that pushes students' (and instructors') thinking beyond a words-plus model can do more than expand students' composing processes (e.g. Shipka, 2011; Yancey, 2004) or tap into students' (presumed) familiarity with Web 2.0 tools to foster critical, impactful digital literacy practices (e.g. Daniels, 2013; Sorapure, 2010). It can also prepare students to meet the rhetorical challenges of "transnational literacy practices" (Hawisher & Selfe, 2010, p. 58) and of interdisciplinary and cross-cultural communication.

By advocating low-tech/low-verbal first-year writing assignments, I am not suggesting that writing instructors abandon digital tools or forsake written and spoken language. Rather, I argue that instructors' ability to consider "how multimodality challenges our rhetorical predispositions in privileging print textualities" (Alexander & Rhodes, 2014, p. 4) can be enhanced by placing pedagogically- and rhetorically-strategic constraints on computer technologies and on linguistic modes of communication. Stuart Selber (2004) argued that functional, critical, and rhetorical literacies would all need to be addressed as multiliteracies entered the digital age. He acknowledged that "rhetorical literacy might prove to be a particularly challenging place to start" and suggested that "how to scaffold instructional activities that illuminate the relationships and interdependencies between these multiple literacies" would be a key question for writing studies (p. 24). I argue that regulating technological and verbal literacy practices by keeping them both at a lower level than is typically the case for digital multimodal assignments reduces the functional hurdles students must overcome in a digital environment while it challenges students to decenter the verbal. This combination of assignment-specific pedagogical strategies can help novice students achieve a higher level of critical and rhetorical literacy in their multimodal composing practices.

In the sections that follow, I examine two factors that impede instructors' efforts to achieve richer multimodal composing practices in first-year writing classrooms: "media redundancy" (Markel, 1998, p. 28) and template-dependence in digital composing environments. Drawing on examples from international print journalism, television advertising, and health sciences, I demonstrate how low-tech, low-verbal approaches to multimodality operate in specific rhetorical contexts and suggest how these examples could be adapted as first-year writing assignments. I then describe the health literacy assignment that I developed for my own first-year writing classes, which illustrates a low-tech, low-verbal but highly rhetorical approach

to cross-cultural, multimodal composing. I conclude by considering how writing instructors' disciplinary goals can be accomplished by moving beyond a words-plus model of multimodality and by creating alternatives to the high-tech methods that dominate the discussions of multimodal composing in first-year writing.

Resisting Redundancy as the Dominant Strategy in Multimodal Rhetorics

The words-plus-images model of multimodality has deep roots in technical communication, as well as in education and instructional design. Carey Jewitt (2006) observed that "once the dominance of image over word was only [a] significant feature of texts designed for the very young" (p. 108) and that, historically, "where people do not have access to writing as a means of communication, a parallel visual story was often embedded in written texts" — not as "decoration," but as "designed meaning" (p. 113). In both cases, this strategy of duplicating meaning with verbal and visual modes compensates for a lack of alphabetic literacy. In technical communication and in instructional design, however, the words-plus-image model is founded on "combining words and pictures, a technique called media redundancy, [which] appears to increase the effectiveness of instructional material" (Markel, 1998, p. 48). Sean Williams (2001) asserted that media redundancy "suggests optimal learning occurs when users can synthesize different types of input to grasp a message" (p. 28). Thus, media redundancy has become a staple of multimodal approaches to composition, not necessarily because it is the most appropriate rhetorical strategy for *persuasion*, but because it is a familiar technique for *instruction*.

When one mode (verbal or visual) is sufficient for conveying information, the addition of a second mode delivering the same content is often justified by claiming that redundancy serves as an emphasis technique. In this sense, Yancey's (2004) critique of images that "simply punctuate a written text" (p. 299) can be read as an indictment of the words-plus model where images do no more than supply a visual exclamation point to an already clear verbal message. Mere duplication of information occurs when multiple modes fail to "come together, intersect, or overlap in innovative and compelling ways" (Shipka, 2011, p. 8). Similarly, Zoetewey and Staggers (2003) argued that the criteria for evaluating multimodal texts should not reward students for a "composition ablaze with theatrical visuals," but rather one designed to meet "sound rhetorical criteria that grow out of our pedagogical aims and the constraints and possibilities of the medium in which they are composing" (Sample section, para. 2). One problem in implementing this advice, though, is that these rhetorical criteria must also be appropriate for the disciplinary, professional, and cultural contexts of the audience.

For example, Jay Lemke (1998) pointed out that "visual figures in scientific text . . . are generally not redundant with verbal main text information. They do *not* simply 'illustrate' the verbal text, they add important or necessary information" (p. 105). Consequently, the expert reader of a scientific text may "read the tables or graphs first, and then their captions, and only then the main text" (Lemke, 1998, p. 96). Similarly, in architecture, redundancy across different media or modes is not valued. This news comes as a shock to novice architecture students who have been schooled in representational drawing, which replicates information that can already be read through models, or who think they must verbally explain what their drawings depict (Allan, 2013). In architecture, visual modes are privileged. Verbal modes are suppressed, sometimes even prohibited for pedagogical purposes (e.g., silent reviews) to ensure that architecture students adhere to the disciplinary values that determine what is rhetorically appropriate (Allan, 2012; Allan, 2013). If the pedagogical aim in first-year writing is to equip students to make

sound rhetorical choices for diverse contexts, then as writing instructors, we do them a disservice if we assume that media redundancy in a words-plus model of multimodality is a universally accepted strategy.

Resisting the Tyranny of the Template

One of the observations that prompted Yancey (2004) to rethink the role of digital technologies in multimodal composition was her realization that architecture students use PowerPoint as "a space for drafting ideas," rather than strictly as a medium "for presentation of a finished idea" (p. 319). As designers, architects are explicitly discouraged from relying on templates, default fonts, and other pre-packaged elements of commonly used software. Yancey argued that when students "complete someone else's software package," they become "the invention of that package" (p. 320). Reliance on "the bells and whistles and templates of the PowerPoint screen" reduces students to "fill[ing] up those templates . . . the moral equivalent of [filling in] the dots on a multiple choice test" — which, in turn, precludes students from "making use of all the means of persuasion and all the possible resources" at their disposal (Yancey, 2004, p. 320). First-year students, who often have a great deal of experience using this software for verbally-dominant presentations, frequently have no idea how to make even simple changes to the design of their slides beyond selecting one of the pre-loaded visual options, nor do they recognize that the readily-available template choices may actually work against their rhetorical goals. The same is true of students' Prezi presentations, which often utterly fail to take advantage of the visual and spatial affordances the platform offers.

When students default to a template as they compose a multimodal digital text, they surrender their rhetorical agency. As Madeleine Sorapure (2010) argued, "Our students need to see software not as a neutral tool but rather as an object of analysis" (p. 60) and, I would add, as a malleable resource. Kristin Arola (2010) argued that, despite "pedagogical attention to modes beyond the alphabetic" (p. 6), the shift from individualized coding to prefabricated templates in Web 2.0 environments distances users from "the rhetorical functions of interface design" (p. 4): "We need to acknowledge that in practice Net Generation students, as well as ourselves, are discouraged in Web 2.0 from creating designs" (p. 6). One solution Arola proposed is to engage students in a hypothetical redesign of existing templates "either in an image-editing software program or with crayons and paper" (p. 12). Although these high-tech and low-tech options are presented as equally viable choices, students' technological literacies may determine which materials would be more successful as methods of resisting the tyranny of the template.

The ubiquity of media redundancy and digital template-dependency in first-year composition paints an inaccurate picture of how multimodality works in real-world contexts. The examples below illustrate a variety of low-tech/low-verbal strategies in professional multimodal texts. Taking these examples as models, writing instructors can develop assignments that expand students' understanding of the options available in multimodal composing. As Shipka (2011) argued, "Requiring that students imagine multiple ways of approaching tasks . . . facilitates rhetorical and material flexibility and leads to increased metacommunicative awareness" (p. 56). Preventing students from defaulting to familiar verbal modes and digital tools can be generative, resulting in a greater awareness of rhetorical choices.

Multimodal Play: Lessons from Journalism

Print journalism traditionally foregrounds alphabetic literacy; it is the ultimate words-plus form of multimodality, with occasional images illustrating written text. However, a visuallydominant variation has emerged in international newspaper journalism: an "image-focused news story genre, where a press photograph is combined with only a heading and a brief caption rather than an extended news report" (Caple & Bednarek, 2010, p. 212). In the articles discussed below, Australian researchers Monika Bednarek and Helen Caple described and analyzed this new genre, providing images of several examples (Bednarek & Caple, 2010; Caple & Bednarek, 2010). In contrast to the traditional journalistic combination of verbal and visual texts, the "multisemiotic news story" is low-verbal: The subordinated caption conveys factual information and argues for the item's "news values"; however, the prominent feature is the juxtaposition of the image and the heading, which typically creates a witty, playful meaning (Bednarek & Caple, 2010, pp. 10-11). Sean Morey (2014) argued that Roland Barthes's concept of "anchorage" the way a caption focuses and constrains the possible meanings of a visual text (p. 115) functions rhetorically "to converge image and text" (p. 114). In the multisemiotic news story, the headline and caption are anchors to different meanings. In Discourse & Communication, Bednarek and Caple (2010) theorized that this juxtaposition produces an "evaluative clash" between the serious message of the caption (in their data set, reports on environmental and natural disasters) and the humor generated by the interaction of the visual image and the visually-prominent verbal text: the headline (p. 17). Benarek and Caple observed, "In the story with the heading Coach does the crawl in middle lane the accompanying picture is of a bus (or 'coach') 'swimming' in the middle of a flooded road" (p. 17), while the caption reports on the destruction of buildings and the number of deaths caused by the severe storms (p. 28).

In *Visual Communication*, Caple and Bednarek (2010) argued that "the newspaper is throwing down a challenge to its readers," whose "prior experience and linguistic knowledge then allows them to 'unpack' the multisemiotic play in the image-nuclear news story" (p. 224). As a rhetorical strategy, this low-verbal multimodal technique creates community boundaries: "Those who have the linguistic and cultural knowledge to take up this challenge and to solve these riddles can feel as if they belong"; those who do not are "excluded" from the joke created in the relationship between the headline and the image, although the image and the caption serve to convey information to the outsiders (Caple & Bednarek, 2010, p. 224). While the ethical implications of using this rhetorical strategy to report on catastrophic events are troubling, the technique itself can be adapted for first-year multimodal assignments that employ low-tech, low-verbal methods.

Students' familiarity with Web 2.0 memes, which simply juxtapose a culturally-recognizable image with verbal text to create humor, could serve as a starting point for introducing such an assignment. However, the multisemiotic news story challenges students to engage with multimodality in complex ways: Students must select or create an image that can be read both as a straightforward journalistic text when paired with an informational caption and as an ironic or humorous text when paired with a headline that invokes a culturally-specific commonplace. Although many students might be comfortable working within the digital meme format, the text could also be composed as a low-tech poster, a word-processed document featuring a figure, or a visually-dominant PowerPoint slide. The conventions of journalistic headlines and captions limit the number of words that can be used, and neither verbal text can merely create media redundancy: The headline must provide the joke; the caption must provide

the news. Each verbal text shifts the meaning of the image, creating both visual humor and visual evidence simultaneously. Composing this type of image-plus multimodal text requires careful rhetorical analysis in order to be successful on both levels and for both audiences.

Material Graphics: Lessons from Advertising

Professional multimodal texts used in advertising are certainly high-tech and verbally, as well as visually, rich. However, Prudential Financial recently produced a series of television ads (also published on YouTube — see *Prudential*, 2015 for the playlist URL) that illustrate a lowtech, low-verbal technique for making multimodal arguments. The *Prudential — Bring Your* Challenges (2015) commercials are videos that document live-action material graphics used to persuade participants (and viewers) that they need financial planning services. The commercials feature everyday people and everyday objects — stickers, magnets, ribbons, dominoes — that are arranged to simulate larger-than-life charts or manipulated to illustrate statistical data (Prudential, 2015). A Prudential advertising executive described one of these commercials as "a visual metaphor" that can "change how people view retirement in hopes of driving them to change their behavior" (McConnel as cited in "Prudential," 2014, para. 2). In the "live, crowdsourced experiment," participants "topple[d] a 30-foot-tall domino stone, starting with a normalsize domino, to convey the long-term outcome of consistent retirement investing" ("Prudential," 2014, para. 1). Next, the facilitator, a Harvard University psychology professor, describes "a row of larger dominoes arranged by size that mimic a graph to demonstrate the growth of the average person's retirement contributions over 30 years' time" ("Prudential," 2014, para. 4). Participants who created the material graphics are then interviewed on camera about how their perceptions about financial planning have changed (*Prudential*, 2015). While these commercials clearly required time, effort, and material resources to produce at a professional level, the basic premise behind the multimodal argumentation strategies used can serve as a model for smaller-scale firstyear writing assignments.

In writing studies, Sorapure (2010) advocated for the use of Web 2.0 information visualization (infovis) tools in multimodal composition. Drawing on Edward Tufte's (1990) work, Sorapure argued that these digital tools offer "yet another way of thinking about the role of the visual as it stimulates, accompanies, critiques, supplements, and/or replaces writing" and that they can "enable us and our students to make the move from consuming to producing visual representations of information" and "develop students' awareness of the limitations and biases of the software they use in our courses and elsewhere" (p. 60). One popular infovis application is word clouds, which, Sorapure acknowledged, are based on the "debatable principle" that "frequency is the measure of importance" (p. 63). Although altering the template is possible, Sorapure's suggestion that students combine infovis tools with image-editing software to create customized multimodal arguments (p. 67) ups the ante in terms of digital literacies in order to compensate for built-in bias in the software or for ineffective, template-driven products.

In mathematics education, techniques similar to the material graphics used by Prudential Financial have long been used to teach mathematical literacies (e.g., numeracy, graphicacy). Manipulatives — concrete objects, such as blocks in various shapes and sizes — are used to represent abstract mathematical concepts. In math pedagogy, as in writing pedagogy, the rise of digital technologies has shifted teaching and learning practices toward the use of virtual (software-based) manipulatives, similar to the infovis software discussed by Sorapure, rather than concrete (physical) manipulatives. Studies assessing virtual vs. concrete manipulatives

suggested that hands-on, multimodal instruction using either format is more effective than traditional abstract instruction, but there is no conclusive evidence that digital manipulatives are inherently superior to material manipulatives (Baki, Kosa, & Guven, 2011; Burns & Hamm, 2011). Given the additional complications of mastering and perhaps altering digital tools to compose a rhetorically effective multimodal graphic text, I argue that a low-tech approach frees students to focus more on their rhetorical goals, unimpeded by the constraints of the digital environment. A live demonstration using everyday materials to create graphics could be documented with a simple video; a static material text with photographs. More importantly, the process of creating multimodal arguments with material graphics has the potential to engage students at a deeper level of learning.

For example, one of my first-year writing students researched Oakland University's recently-implemented smoke-free campus policy, arguing that efforts to promote it were ineffective. In response to my requirement that the written paper also include some visual elements, she took photographs of graffiti on a sign announcing the new policy and cigarette butts on the ground near the entrance to the library, a picturesque spot on our campus that features an iconic fountain (see "Saints and Sinners Fountain," n.d.). The photographs merely illustrated what this student and her audience already knew: The signs have not stopped students from smoking on campus. She could have enhanced her paper with traditional graphs on the negative effects of smoking, but her research suggested that her peer audience was not persuaded by the typical anti-smoking statistics or the appeals for "clean air" used in the new signs. Material graphics might have been used to invent other arguments, however, such as the negative aesthetic effects of smoking on campus. For example, she could have video-recorded herself counting cigarette butts near the fountain. Alternatively, she could have arranged the butts in front of the fountain or put them in a glass of water on the edge of the fountain, and then photographed them as visual arguments for the new policy: smoking obstructs our view of the beauty of the campus; smoking pollutes our campus culture. Had I introduced material graphics as a multimodal rhetorical strategy, this expanded view of multimodality might have pushed my student's thinking beyond media redundancy.

In architecture, for example, Nils Gore (2004) demonstrated that "serious play" with "real" materials encourages students to be more innovative and experimental (p. 39). In addition, "exploration with materially based projects, crafted by hand, promotes the development of a critical discourse between maker and object, and between maker and critics/colleagues" (Gore, 2004, p. 41). Manipulating a variety of materials is also important because it causes us to resist what Gore calls "the accelerating nature of our industrial culture to introduce expanded and precise ways to fabricate and faster and more accurate ways to draw" (p. 44) — or to write. Digital drawings in architecture can look deceptively "finished," just as a word-processed draft, a PowerPoint presentation based on a template, or an infovis graph can look temptingly "done." For architects, drawing on trace paper encourages risk-taking and multiple iterations, whereas an ink drawing on expensive vellum requires precision and suggests certainty. In the digital environment, the difference between an exploratory sketch and a final drawing is not so obvious. Similarly, I argue that gravitating toward the digital when introducing multimodality into the writing classroom can prematurely emphasize the product rather than the process. Adding low-tech, material multimodal activities sets the tone for playful exploration.

"CLAMs": Lessons from Health Sciences

Professionals in the health sciences have responded to the need for effective cross-cultural communication to promote health literacy by developing "CLAMs" — "culturally and linguistically appropriate materials" (Marks, 2009; Osborne, 2000, 2001, 2015; Smith & Gonzales, 2000; Watters, 2003). For example, Helen Osborne (2000) described a Multicultural Coalition on Aging conference that "teaches a core health curriculum in eight different cultures and languages" using CLAMs that featured Spanish and African-American music, as well as visual materials for Chinese-speaking senior citizens and Haitian participants, "since Haitian Creole is traditionally a spoken language" (Taking More section, paras. 1-2). Osborne (2001) emphasized that "to overcome cultural barriers" CLAMs must include both "the words people know" and "the logic and experience people use to understand these words" — stressing the need to "field test [CLAMs] with the intended audience" (p. 47). Health educators, physical and occupational therapists, nurses, and other healthcare workers mediate physician-patient communication, translating complex medical information not only in the literal, linguistic sense but also by finding ways to bridge gaps in cultural values and practices.

The real-world stakes for such cross-cultural multimodal communication are high. Ray Marks (2009) argued that using CLAMs can "empower clients in the decision-making process" and "is likely to enable more effective adherence to health recommendations, promote healthful choices, reduce medical errors, and heighten client safety and well-being" (p. 331). Similarly, Elisa Watters (2003) advocated a participatory-research, interdisciplinary, team-based approach to composing CLAMs as "a powerful tool to combat issues that stand as a barrier to health and well-being" (p. 53). Because of the importance of written documentation, Sandra Smith and Virginia Gonzales (2000) warned that "providers who fail to communicate effectively with patients who have limited English skills run the risk of malpractice claims arising from injuries suffered because of miscommunication"; therefore, "written information should always be available, even in the presence of other media" (p. 46). Nevertheless, CLAMs cannot be verbally-dominant. As instructional tools, their cultural and rhetorical effectiveness depends on the interaction of a limited number of carefully chosen words with other modalities.

Although health literacy experts do not use the disciplinary vocabulary of composition and rhetoric, the communication strategies they advocate are multimodal and highly rhetorical. In one case study of technical communication and medical rhetoric, Hannah Bellwoar (2012) documented the importance of a patient's role in the construction of knowledge through active engagement with a variety of official/medical and unofficial/popular multisemiotic texts, described as a "complex network of information" that underscores "the prominence of multimodal texts" in health literacy (pp. 327-328). Bellwoar's analysis of the patient's interaction with these texts featured visual figures that show a redacted medical form with discharge instructions (p. 333), printouts of Wikipedia pages about dietary restrictions with the patient's handwritten annotations (p. 334), a color-coded medical diagram (p. 339), and ultrasound images (p. 341). Assignments that ask students to produce such multimodal texts (or to revise and repurpose published examples of them) can help students to develop critical thinking skills, multimodal literacies, and rhetorical flexibility.

Promoting Health Literacy: A Sample First-Year Writing Assignment

At Oakland University, I teach first-year writing classes that follow a learning-community model: Pre-med, pre-nursing, or health science majors enroll in special first-year writing sections connected to a first-year seminar or a general education course. In this curricular context, I have designed assignments that ask students to explore health literacy as a form of multimodal communication and to apply rhetorical concepts in order to develop their own low-tech, low-verbal health literacy texts. We begin by investigating various definitions of health literacy and by analyzing examples of multimodal health literacy strategies, including a series of columns originally published in a medical trade publication that Osborne (2015) has archived on her *Health Literacy Consulting* website. Osborne's website includes descriptions of multimodal texts and links to professionally-produced examples. After this introduction to the conceptual framework, students compose a brief health literacy narrative based on their own experiences or on their observations of the experiences of someone they know well, using pseudonyms to avoid revealing any personal health information.

The students then develop a multimodal text that could be used to improve health literacy communication with a population of patients or clients represented by their health literacy narrative. This health literacy tool must address a specific problem, such as not understanding a physician's instructions or experiencing a conflict in values related to a medical intervention. Students are encouraged to use low-verbal strategies, restricting the amount of written or spoken text to brief explanations in plain language to ensure that the health literacy tool is accessible to patients who may have limited English-language skills. They are also encouraged to use low-tech strategies, such as posters or physical materials, to ensure that the information is available to those who may not have access to digital resources. Finally, the students compose brief written arguments, similar to cover letters or executive summaries, to persuade an audience of health professionals to integrate these multimodal health literacy tools into their practice in order to improve professional-patient communication.

This scaffolded sequence of assignments requires students to consider multiple audiences and purposes, to synthesize and apply information from a wide range of sources, and to develop their own multimodal, rhetorical strategies in response to a real-world problem. It also requires iterative development and critical reflection. Students' first attempts at creating a multimodal text, even after they have been explicitly cautioned against relying on digital templates, often result in a poorly-designed, word-heavy brochure or PowerPoint presentation. Old habits die hard. In addition, their first attempts at a two-pronged assignment — where the multimodal informational text is directed at a lay audience of patients or clients, but the written persuasive text is directed at a professional audience of healthcare practitioners—confounds students at first. They slip into addressing the health professional as if s/he were the patient; they include medical jargon in their health literacy tool or make unexamined assumptions about shared cultural values.

It is precisely in these missteps that students begin to recognize the importance of a rhetorical approach to multimodal composition in real-world contexts. As Shipka (2011) argued, reflective analysis on the student's rhetorical and material choices helps us to focus on "the final product *in relation to* the complex and highly rigorous decision-making processes the student employed while producing [the] text" (p. 3); for students, it promotes "a more nuanced awareness of the various choices they make, or even fail to make," and it prompts them to evaluate "the effect those choices might have on others" (p. 85). Opportunities for critical reflection, constructive feedback, and large-scale revision are built into the assignment design so

that, as Gore (2004) argued, "By approaching [the project] in a repetitious cycle, the student engages in a long conversation with the subject and comes to know it intimately" (p. 39). This level of engagement can yield long-term benefits for students. One bilingual health science major, whose first-year project addressed the scarcity of CLAM resources for Arab American patients in a local hospital, went on to research this problem extensively for her senior honors thesis, volunteered to support Arab-speaking participants at a local fundraising event for cancer research, and received a scholarship from an Arab American community group.

For her first-year writing project, my Arab American student drew upon her linguistic resources unprompted. Most of my first-year students are not fluent in a language other than English, nor are they medical or health science experts, although some have first-hand knowledge about particular medical conditions such as Type 1 diabetes or sports-related injuries. The assignment does not require students to focus on linguistic translation or on diagnosis and treatment, which are beyond their skill sets. Depending upon the institutional context, the assignment could be expanded to include interdisciplinary collaboration with faculty and/or students who could act as consultants or as representatives of the target audiences so that students could actually field test their proposed health literacy materials beyond the first-year writing classroom.

However, technical expertise in production is not the goal of the assignment. Even when a high-tech digital solution is proposed, a low-tech mock-up is sufficient to represent the rhetorical, multimodal, and cultural strategies intended. For example, one student proposed a smartphone app designed for teenagers with sports-related knee injuries. In her case study narrative, she explained that the physician had provided medical information orally and had prescribed physical therapy. The teenager was confused by the physician's instructions and did not consistently follow the physical therapist's exercise routines, so the recovery time was longer than anticipated. Medical reference apps and clinical support apps (e.g. timers and angle measurement tools) actually exist, but my student proposed a customizable version combining plain language medical information and instructional videos with tools to prompt, motivate, and track the teenager's physical therapy workouts. My student used a Prezi presentation to illustrate how her app would work, but simple diagrams would have been equally acceptable for the purposes of the assignment.

The health literacy assignment is based on the rhetorical premise that different strategies — including different modalities — should be used to address expert vs. non-expert audiences. As such, the assignment could be adapted to other disciplinary contexts to accommodate students' interests. Examples of multimodal texts abound in other fields: art history, business, chemistry, dance, engineering. In each case, the goal is to identify and analyze examples of multimodal texts that professionals use to communicate with each other and with lay audiences and to use these texts as models for students' own multimodal compositions in response to real-world scenarios: museum displays, credit reports, food labels, program notes, building permits. Encouraging low-verbal, low-tech multimodal products would keep the focus on developing the rhetorical strategies needed to adapt to these different rhetorical situations.

Conclusion

In the United States, the National Council of Teachers of English (2013) argued that to be "active, successful participants in this 21st century global society," students must "develop proficiency and fluency with the tools of technology; build intentional cross-cultural connections

and relationships. . .; design and share information for global communities . . . ; [and] create, critique, analyze, and evaluate multimedia texts" (para. 1). Although I agree that digital literacies are important, I argue that, in the context of first-year writing classes, building a rhetorical foundation for interdisciplinary and cross-cultural communication should take priority over teaching multimodal composition as an exclusively digital skill. In this journal, Christie Daniels (2013) challenged writing instructors to push students beyond using social media to "share their teenage worlds with one another" and toward "world-altering social engagement and activism" (p. 55). An intermediate step in achieving these disciplinary goals, I argue, is to challenge students to become more aware of the ways that rhetorically effective, culturally diverse multimodal texts already operate in disciplinary, professional, and social contexts. If "Web 2.0 takes design away from us," as Arola (2010) argued, "then we need to find a way to reengage it" (pp. 7-8). One way to accomplish this objective is to move beyond a words-plus model of multimodality in a pedagogical space where the impediments of media redundancy and template dependence are mitigated by a low-tech, low-verbal approach to multimodal composing.

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