

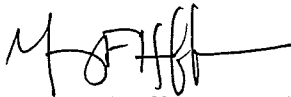
May 10, 2017

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Students' Digital Media Use in College Writing Classes:  
An Empirical Study of Preferences, Practices, and Possibilities

By William Foy

A Thesis Submitted in  
Partial Fulfillment of the  
Requirements for the Degree of

Master of Arts  
English: Writing

At

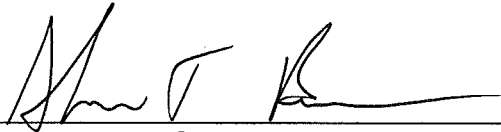
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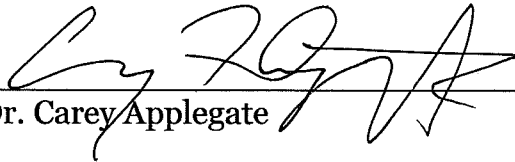
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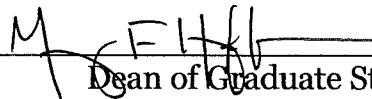


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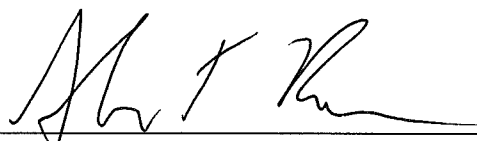
Students' Digital Media Use in College Writing Classes:  
An Empirical Study of Preferences, Practices, and Possibilities

By

William Foy

The University of Wisconsin-Eau Claire, 2017  
Under the Supervision of Dr. Alan Benson

This empirical study is an attempt to gauge the extent to which college students are adding visual and other computer-generated elements—such as photos, video, and hyperlinks—to classwork as well as for their personal online interactions. The study is based on recommendations by scholars such as the members of the New London Group, who have called for educators to broaden students' literacy skills by incorporating the multimedia elements that are part of communication in the 21<sup>st</sup> century. The research, which included a survey of students and interviews with students and college instructors, found that students and instructors, to varying degrees, are embracing multiliteracy skills despite challenges and the inevitable learning curve that accompanies new technologies and related processes.

  
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Thesis Adviser

5/9/17  
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Date

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Students' Digital Media Use in College Writing Classes: An Empirical Study  
of Practices, Preferences, and Possibilities

*"I love using images and videos because, for me personally, I know it's interesting. I know people my age will get a better understanding of the material I'm presenting; it takes it to another level than just seeing text."*

— Julia, 19-year-old university student

## I. INTRODUCTION

### **Time spent on social media**

In the influential article "A Pedagogy of Multiliteracies: Designing Social Futures," the New London Group contends that reading and writing skills extend beyond the standard words-on-paper format. "(W)e argue that literacy pedagogy must now account for the burgeoning text forms associated with information and multimedia technologies" (9), the scholars assert. As indicated by the article's title, the NLG highlights the term "multiliteracies" to represent the direction needed for instruction on rhetoric and communication.

It would be an understatement to say, more than 20 years since the NLG's observation, text forms have continued to multiply, notably when it comes to students' personal lives. The work of data-gathering organizations backs up the generalization that young people spend copious amounts of time producing and perusing messages containing visual and sonic elements along with the printed word. In a 2015 study, the Pew Charitable Trust finds that 92 percent of teenagers report visiting the internet daily, with 24 percent of them saying they

go online “almost constantly” (Lenhart 1). The research emphasizes that such high usage is due, in part, to the convenience of access provided by mobile devices, notably smartphones (1).

A 2010 Kaiser Family Foundation study of media use yields similar results. According to “Generation M2: Media in the Lives of 8- to 18-year-olds,” the young people surveyed spend 7.5 hours a day with media (Rideout, et al. 1). As with the Pew Center’s findings, the Kaiser researchers conclude that the “explosion” of online media, particularly from handheld devices, has fueled the growth in young people’s voracious consumption of material they can access on their personal computers (2). While the Kaiser study referenced an array of media, including movies, music, and television shows, social media sites were part of the mix (6).

### **Digital media use in academic work**

But other findings suggest that while students engage with 21<sup>st</sup> century technology freely in their leisure time (including when they might otherwise be working or doing homework), their multimedia activities have been more limited in their schoolwork. A Revisualizing Composition study, published in 2016, finds in its survey of 1,366 college students that the subjects drew from a wide variety of media to compose as part of their personal, academic, and professional lives (Moore et al. 1). The list of possibilities, all of which were used for a school assignment by at least some of the respondents, include Facebook, notebook or paper, pencil, word-processing program, email, Twitter, Wiki, and blogs (Moore et al. 6). However, the study finds that while the cellphone was listed among

students' most valued genres and most often used genres, they engage with that technology far less for purposes such as academic papers.

This leads to a paradox: Students communicate extensively and in multiple forms with others in their free time, but academia, where one of the goals is to teach students to express themselves articulately, may not necessarily be tapping into the skills that students spend hour upon hour practicing. While the level of sophistication required for a tweet or Facebook post differs significantly from that of an essay for a composition class, the Revisualizing Composition study suggests it's the more casual forms that make far greater use of varied electronic media ever-present in 21<sup>st</sup> century life. Some colleges certainly have brought the newer media into the classroom. Cheryl E. Ball, for instance, has shared her experiences teaching courses whose primary focus is on multimedia composition (Ball, Tia Scoffield Bowen, and Tyrell Brent). But even teachers of first-year writing classes, tasked with the still formidable challenges of getting students to craft strong arguments and grasp the complex strategies of writing, can productively engage with multiliteracies. After all, what better time could there be to take students' second-nature skills with media such as photos or video and, however fleetingly, begin to help them see how they can strengthen arguments and illustrate rhetorical principles such as ethos, logos, and pathos.

### **Goals of the study**

To determine how extensively college writing classes utilize students' digital media skills, I conducted a survey of approximately 150 students total from two Upper Midwestern postsecondary schools and met with students and

instructors for follow-up interviews. The students were asked about their use of digital forms—including photos, video, and audio links—on their favorite social media platforms and whether they have incorporated such elements into their assignments for high school and college courses.

This study will offer researchers, instructors, and students a snapshot of how the NLG's aims for multiliteracies pedagogy are faring through the quantitative findings of the survey and the qualitative statements of students and instructors about the benefits and limitations of bringing multimedia practices into the classroom.

## II. LITERATURE REVIEW

### **Origins of communication**

Literacy and technology have been linked not just for decades but for millennia. Walter Ong shows in *Orality and Literacy* that advancements have dramatically affected communication since the written word altered an exclusively oral culture. Citing Rhys Carpenter by way of Eric Havelock, Ong notes that the Greek alphabet was developed around 720-700 B.C. ("Milman Parry's Discovery," Chapter 2). Still during the pre-Christian era, in Plato's *Phaedrus* (circa 274-7 B.C.), Socrates expressed criticisms of the written word, as compared with spoken communication, that strike a familiar chord for contemporary readers. His objections: Writing is inhuman and merely a manufactured product; the process weakens one's mind by doing tasks that once relied on memory; a written text is unresponsive when challenged; and such a text allows for no give-and-take ("Plato, Writing and Computers," Chapter 4). Writing, print, and computers all have technologized the word, Ong emphasizes, adding that his point is bolstered by the fact that critics of new forms never fail to use the most advanced technology available to express that critique (Chapter 4). In sum, history has proved that opposition to such advances isn't just ill-advised but futile.

Many of writing's perceived flaws, Ong says, have been ascribed to the computer as well, strengthening his point that technological innovations have their place in literacy. In fact, Ong coins the term "secondary orality" (Introduction) to refer to electronically generated communication, arguing it compares to the spoken word in the sense that it builds a strong group sense

while written works turn individuals inward (“Post-Typography: Electronics,” Chapter 5). The capacity to unify can be seen clearly in large audiences connected through social media services such as Facebook, Twitter, and Snapchat.

Ong’s position that the written word should hold no supremacy in communication drew from the theories of Ferdinand de Saussure. Ong credits the Swiss linguist and semiotician for pointing out “the primacy of oral speech, which underpins all verbal communication, as well as to the persistent tendency, even among scholars, to think of writing as the basic form of language” (“The Literate Mind and the Oral Past,” Chapter 1). In Saussure’s semiotic theory, a linguistic unit consists of two elements. Those two parts, he emphasizes, are not a thing and its name but a concept and a sound pattern (note the allusion to the spoken, not printed, word). He refers to the linguistic unit, concept, and sound pattern as, respectively, sign, signification, and signal (in many translations of Saussure, the word “signification” is referred to as “signified,” and “signal” as “signifier”).

As Saussure explains, the first principle of linguistic signs is that they are arbitrary. “Arbitrary” does not mean individual speakers have free rein with signs, Saussure insists, pointing out that signs can hold significant power once a culture accepts them. Rather, the signal is “*unmotivated*: that is to say arbitrary in relation to its signification, with which it has no natural connection to reality” (“First Principle: The Sign is Arbitrary,” Chapter 1). The lack of a natural connection between signal and signification suggests an openness to the changing forms of communication, such as the current use of multimedia in online forums. If the thing and its sound pattern don’t need to take any predetermined form, then a photograph, playlist, or emoticon has a place in this system—what’s

important is the relationship between signal and signification, not the form of the signal.

Modifications to signals are only natural, Saussure argues, because language doesn't exist in isolation but, over time, is altered by the social forces that act upon it. As he puts it, "Evolution is inevitable: there is no known example of a language immune from it" (1773). Today's social media practices bring a whole new dimension to this evolution, with linguistic signs taking entirely new forms, including the clipped verbiage and sparse punctuation of texts, the limited characters of tweets, and the pictorial nature of snaps. The quirks of these text forms, and the often unwritten rules that guide their use, heighten the need to examine them from a rhetorical perspective, especially in a classroom.

Education philosopher John Dewey would seem to offer further encouragement for incorporating electronic media into written assignments. Writing at about the same time as Saussure, Dewey argues that education is most effective when it relates to students' experiences outside the classroom—a significant point considering how avidly students engage with online media. He writes, "There is the standing danger that the material of formal instruction will be merely the subject matter of the schools, isolated from the subject matter of life-experience" (Chapter 1). It is especially noteworthy that Dewey finds his theory advanced by the fact that the "split" between students' education and personal lives was never greater than in his time "on account of the rapid growth in the past few centuries of knowledge and technical modes of skill" (Chapter 1). By measures such as the growing capabilities and shrinking size of the personal computer, this progress continues to hurtle forward.

### **Multiliteracies pedagogy**

The New London Group provides a road map of sorts educators can use to incorporate the myriad online possibilities into their courses. The group of 10 scholars, named for the New Hampshire city where they met in 1994, argues for a new approach to educate students in a way that allows them to participate fully in “public, community, and economic life” (60). As the group points out, educators must prepare students for a changing technological and organizational structure of the workplace that has provided some with great wealth while shutting out others from financial success.

The NLG’s multiliteracies pedagogy focuses on the concept of design. The term, used in place of “writing” or “composing,” reflects the fact that teachers and learners are given patterns and conventions of meaning but also have the power to redesign those configurations (65). The group identifies six design elements—linguistic meaning, visual meaning, audio meaning, gestural meaning, spatial meaning, and multimodal meaning—that constitute the expanded design palette available to augment the traditional print format.

To further put the term “design” into its proper context, the NLG presents four interrelated factors at the center of its proposed pedagogy (83):

- Situated practice is based on, first, the world of learners’ designed and designing experiences and, second, beginning the practice of building on those experiences by immersing students in a learning community designed to heighten their knowledge of related skills and critical understanding.

- Overt instruction enables students to shape for themselves an explicit metalanguage of design.
- Critical framing relates meanings to their social contexts and purposes.
- Transformed practice allows students to transfer and re-create designs of meaning from one context to another.

These four components reflect how a multiliteracies pedagogy fits together: what students bring to class and how they begin to develop it (situated practice); what they continue to learn in class (overt instruction and critical framing); and how they apply what they have learned to their own composing (transformed practice)—both in the classroom and on their favorite social media sites.

In making a point similar to what Dewey advocated, the NLG emphasizes the importance of integrating the learner's life into an education. "To be relevant, learning processes need to recruit, rather than attempt to ignore and erase, the different *subjectivities*—interests, intentions, commitments, and purposes—students bring to learning" (72). Taking these varied subjectivities into account, the NLG notes, constitutes more than merely "glib and tokenistic pluralism" (72). Instead, with the ever-expanding sphere of languages and discourses, students need to be skilled in as many of these forms as possible.

Moreover, the NLG finds: "There is ample evidence that people do not learn anything well unless they are both motivated to learn and believe that they will be able to use and function with what they are learning in some way that is in their interest" (85). Students' social media practices provide just such motivation when they are effectively included in writing assignments—crucially so when, as

some students and teachers express in my survey and interviews, those practices hold high value in the professions to which they aspire.

One of the challenges of adopting a multiliteracies pedagogy lies in observing the vast differences between visual and alphabetic forms. Such complexities are explored by theorist Roland Barthes in his seminal “Rhetoric of the Image.” In analyzing a printed advertisement, Barthes uncovers literal and symbolic messages that tap into a multitude of a given culture’s significations. Barthes’ analysis of an image’s linguistic, denoted, and connoted messages reveals that even the superficially simple photograph of a food product can conceal a host of meanings beyond what is discovered at first glance. Barthes also states that a linguistic message appears in every image, in forms such as a title, caption, film dialogue, comic strip balloon (155), directing the viewer toward the intended messages and cues to the significations implied. His observation suggests two points: Alphabetic literacy still plays an important role in composition studies, and the relationship between varied forms holds a key to a multiliteracies pedagogy.

Stuart A. Selber elaborates on the depth of understanding needed to embrace a multiliteracies pedagogy in *Multiliteracies for a Digital Age*. He expounds on the three literacies he deems essential to working with multimedia forms: functional literacy, in the context of students as users of technology; critical literacy, the process of questioning technology, which he also refers to the “politics” of computers; and rhetorical literacy, which relates to students as producers of technology (25). The three concepts provide a framework that instructors can bring to their own classrooms. In addition, the concepts

emphasize the theoretical and technical understanding required to make effective use of multimedia in a writing class. As such, Selber accurately asserts that students will require “direct, repeated, and integrated contact with the particulars of all three literacies” (235) to develop a “keen and judicious sense” of the technological forces in their world.

The practice of utilizing the ever-multiplying media and diversity in communication benefits from a more expansive theoretical understanding of related concepts. Semiotician Gunther Kress provides such insight in “Design and Transformation: New Theories of Meaning,” part of the anthology *Multiliteracies: Literacy Learning and the Design of Social Futures*. That volume republishes the NLG’s groundbreaking article and includes essays by some members of the group. One of his chapters explains why language-based theories of communication are no longer adequate. As he states bluntly: “A semiotic theory which does not have an account of change at its core is both simply inadequate and implausible in the present period” (150). Specifically, Kress argues that such theories in a world of multimodality can’t lean primarily on print or on any single mode unless it is largely similar to all the other modes. As the NLG points out, designated modes, or designs, all have their distinct elements.

Kress further elaborates on the NLG concept of design, with emphasis on redesign. Previously, writers were simply text makers who acted as critics of print-based works. But the varied modes of expression now call for “complex orchestration” of such elements that results not just in adhering to past ways but in crafting a design that “shapes the future through deliberate deployment of

representational resources in the designer's interest" (156). This theory may raise the stakes for first-year composition, perhaps to the point of making it seem intimidating—until one realizes that students perform such orchestration, or designing, every day on platforms such as Facebook or Twitter, where they post images accompanied by written text.

### **Multiliteracies in practice**

Kathleen Blake Yancey has been among the more widely cited advocates of multiliteracies pedagogy. In "Made Not Only in Words: Composition in a New Key," which is the printed version of the chair's address that Yancey gave at the 2004 Conference on College Composition and Communication, she points to the explosion of writing that students are doing of their own volition outside of school. Her address illustrated the plethora of electronic media through two screens of slides flashing behind her as she spoke. The printed version of her remarks featured explanatory notes running alongside the main text, plus reproductions of some of the slides. Preaching what she is practicing, Yancey points out that the personal writing students do makes use of the rhetorical tenets, including a rhetorical situation, purpose, audience, and choice of media. Moreover, she argues, technologically based communication is changing rapidly—so much so that the definition of writing is expanding to include not just typed text but images, audio files, and blogs (298), to name a few of the forms that young people enjoy on their own time.

Yancey expresses surprise at not only the amount of multimedia writing that students do on their own time but the exuberance with which they compose

and examine such communication. “Don’t you wish that the energy and motivation that students bring to some of these other genres they would bring to our assignments?” she asks (298). Yancey conveys the urgency of introducing such electronic composing methods in the classroom through tracing historical trends and noting practices of her students. The challenge remains for educators to devise specific methods of teaching multiliteracies that fit with their lesson plans.

But changing the practices in composition courses, which have existed in American higher education for nearly three centuries (Crowley, 49), inevitably raises questions if not resistance. Such friction arises in a pair of articles in *College Composition and Communication* in 2009 and 2010. In “The Movement of Air, the Breath of Meaning: Aurality and Multimodal Composing,” Cynthia L. Selfe articulates the vital role that sonic components, including music and speech, play in students’ lives and the importance of using sounds as a mode in composition classes. In a piece the following year, Doug Hesse writes that, while he finds Selfe’s argument compelling, it raises two questions: Is the orientation of the field “rhetoric/composing” or “writing/composing”; and whose interest should the composition class serve (603)? For possible answers to the latter question, Hesse suggests the school, the workplace, society in general, the individual, and the discourse. Certain answers to these questions would “entail more than some supplemental tweak of current courses” (605), he argues.

In her rebuttal, Selfe favors rhetoric/composing. Through that orientation, she engages students in “lots” of writing but also helps them “*begin the complex process* of learning how to make use of all sorts of design resources” (606, ital. in

orig.), a possible nod to the NLG. As to whose interests should be served, she argues that students, society, and teachers (608) benefit from multiliteracies pedagogy. Learning should encompass not just the modes of communication students are comfortable with, she insists, but skills that are needed and expected in public and work life. Selfe also asserts that faculty have an interest in becoming role models for learning new modalities. That point may make some instructors uneasy, if one accepts the digital native-digital immigrant dichotomy popularized by Marc Prensky, referring to the younger generation being far more comfortable with digital technology than are their elders (1-2). But the vital question should remain focused on which methods best serve students.

### **Case studies of multiliteracies**

Varied studies have explored the benefits and challenges of incorporating multimedia into composition classes. In one such examination, Michael-John DePalma's efforts relate to the concept of transfer, specifically how students' print-based writing knowledge can inform their work on a digital text. DePalma focuses on his practice of asking students in his Advanced Rhetoric and Writing course to compose a written essay and a digital story that explores a critical moment for them related to literacy, ethics, sense of identity, or beliefs. He tells them that the content and form of one text need not be a direct translation of the other (620). Rather, he says, students should find the semiotic resources best suited to their chosen medium.

For this study, DePalma interviewed nine students and then ultimately chose two of them to serve as case studies about how they perceived transfer of

their print-based composition knowledge to the multimodal work (621). He found that providing writers opportunities to reflect on how their varied literacy skills relate to each other can serve to “position them to integrate their multiple literacies in meaningful ways” (632). But, he points out, such reflection will have no value if students aren’t focusing on the essential issues related to transfer of the varied skills, such as which ideas conveyed with text could be conveyed through sonic or visual means (636). His study indicates how functional, critical and rhetorical literacy work in the act of transfer.

A different study explores a question related to awareness of various media’s defining characteristics: whether such media are appropriate in a particular situation. Irene Clark’s work, involving her and other instructors’ first-year writing classes, focused on both traditional essays and, after those were completed, a blog consisting of several students’ work and including new-media-based material. She finds that, however eager students were to make use of sounds and visuals, their understanding of genre transfer, that is, whether material was appropriate in particular contexts, was lacking. She pointedly notes that instructors should make sure students know how new media elements should function within an academic text (19). Such an acknowledgement serves as a warning to an instructor who thinks such a practice will be easy.

A different set of questions focuses on the unfamiliarity and discomfort some students and teachers may have when it comes to technology. That reality was explored by Selber and Michael J. Faris in their study involving use of first-generation iPads in the classroom. Their findings, published in 2013, revealed that students’ and teachers’ interaction with the new devices varied widely. As

they wrote, “This entangled process resulted in a set of rich encounters with the iPad that were inescapably contingent and complicated” (400). The 20-plus heuristic questions (401-402) they proposed to help educators venturing into multiliteracies pedagogy include the following: How might students and teachers be encouraged to commit to and customize technology in courses? What sorts of technologies and practices are students and teachers invested in? How might teachers be encouraged to abandon efficient, serviceable practices for new practices with uncertain outcomes? Such concerns, as well as others on Faris and Selber’s list, surely can guide students and teachers as they face technologies that take them out of their respective comfort zones. The guidelines further imply that, in many cases, some questions don’t have easy answers.

But the literature does contain hope for progress. Diana George describes an assignment in which she merely asks students for a visual composition—and leaves it up to them to decide the form, medium, and aim. She finds the students took seriously the argument they made and how it should be evaluated. Most importantly, George observes that, in the time she has given the assignment, she has been struck by “how many students seemed comfortable in the realm of visual design than had in years before” (28). While no specific reason for that progress is cited, students’ intense interest in multimedia would seem to be a logical one.

The use of multimedia in classrooms gives rise to the standard generational question: Are students simply more comfortable than their elders with electronic media? Stephanie Vie surveyed composition students and instructors, inquiring whether they used the social networking services MySpace

and Facebook. Her study shows that the question of whether a digital divide exists between students and instructors is worth pursuing. Specifically, the evidence “overwhelmingly” shows such a chasm between students and instructors (17). Specifically, she reports that, among students, 65 percent had MySpace accounts and 61 percent had Facebook accounts. Among instructors, 60 percent did not use MySpace, and 74 percent did not use Facebook.

Vie finds that while some of this is unavoidable, instructors shouldn't ignore the potential teachable moments in such online spaces (21). It may be, however, as my study results suggest, the divide may have narrowed to some extent in the time since 2008, when her article was published, after which other social media platforms have become more widely used and MySpace has faded.

Some instructors, or even some students, intimidated by computer-generated media could take solace in Ong's conclusion that technology has always been present in literacy. Similarly, Jason Palmeri's *Remixing Composition: A History of Multimodal Pedagogy* makes a strong case for the argument that multimedia forms have long been present in writing and rhetoric. As he points out, that's true not only because of the typographic elements appearing in an essay typed in the Microsoft Word program but in the way that innovative writing strategies have made use of other artistic forms of composing (3). Palmeri also advocates sophisticated forms as a part of composition elements, including filmmaking and audio playlists. Whether such challenging media would have a place in first-year composition, or if that should be reserved for more advanced courses, should be considered carefully.

Discussions of multimedia use in the classroom often turn to the question of access. One exploration of that issue sees haves and have-nots among schools and individual students. Joanna Goode, in “Mind the Gap: The Digital Dimension of College Access” (2010), reveals that the digital divide remains among students—although that demographic possesses widespread technological familiarity—but to widely varying degrees. This divide may involve race, class, gender, and even resources at educational institutions.

### **The need to adapt**

At least two national groups of writing educators make it clear that, whatever the challenges and obstacles facing a multiliteracies pedagogy, the field is moving inexorably in that direction. That orientation stands out in both the National Council of Teachers of English definition of 21st century literacies, adopted in 2008 and updated in 2013, and the Council of Writing Program Administrators' 2014 outcomes statement for first-year composition. Both organizations, for example, strongly suggest a familiarity with updated media, as the NCTE says students must develop “proficiency and fluency with the tools of technology” and the CWPA calls for students to “(u)nderstand and use a variety of technologies to address a range of audiences.”

The groups also note that, beyond simply using digital elements to communicate, students should possess rhetorical understanding as well. The NCTE recommends that, in addition to composing skills, students should be able to “critique, analyze, and evaluate multimedia texts.” For its part, the CWPA

would have students “learn and use key rhetorical concepts through analyzing and composing a variety of texts.”

The previously mentioned Revisualizing Composition study, which finds some crossover between young people’s use of digital media in personal and academic realms, might raise the hopes of the educators groups. Taking it a step further, the authors of that 2016 study support efforts to consider how these tools could be integrated into classroom assignments. Part of the reason for their advocacy is so instructors could teach them to utilize these forms more effectively in all contexts (10). The findings also echo the need for further investigation into whether students transfer the skills they’ve acquired in their personal writing to their class assignments (10). As previously mentioned, that is one of the key goals of my study.

### III. METHODS

#### **Schools participating in the study**

To gauge whether composition instructors integrate young people's social media practices, I conducted a survey and interviews during the spring 2016 semester. I surveyed eight college first-year writing classes, four each from a comprehensive regional university and a two-year technical college. Both are in the Upper Midwest. According to information provided by the respective schools:

- The university enrollment is 9,981 undergraduates and 648 graduate students; about 62 percent are female and 38 percent are male; 88 percent are white; and 94 percent are younger than 25. Sixty-nine percent are from the state where the campus is located, and 24 percent are from a nearby state. About 17 percent received Pell Grants, funded through a federal program serving students in financial need.
- The tech college enrollment is 16,328, with 9,741 classified as noncredit students and 8,755 as credit students. Fifty-six percent are male and 44 percent female; 91 percent are white; and 40 percent are older than 25. The college draws students mainly from an 11-county region, although some are from outside that area, particularly those who take online courses. About 51 percent receive Pell Grants.

I chose to survey first-year writing classes, rather than more advanced courses, for two primary reasons:

- To reach students from a broad range of programs at the respective schools rather than, perhaps, predominantly those specializing in communication-related fields.
- To gauge the types of multimedia practices students are bringing to the respective schools rather than those they are developing during their postsecondary education.

I surveyed both campuses to reach postsecondary school students who, cumulatively, form a slightly more diverse demographic profile—particularly in terms of age, income level, and place of residence—than would have been possible by approaching just one of those schools.

### **Details of the study format**

I set up an online survey of 20 questions with Qualtrics software. The questions sought specifics on students' digital media use in both high school and college (See Appendix A for the text of survey questions and answers). Using a combination of questions seeking multiple choice answers and open-ended responses, participants were asked about the following areas:

- The time they spend on social media, the sites they visit, and the types of digital media they add to their posts.
- Whether they add digital media to high school assignments and, if so, which types of digital media they add for which courses.
- Whether they add digital media to college assignments and, if so, which types of digital media they add for which courses.

- Whether their college instructors use online course management systems, specifically whether they received grades and comments on assignments through the system.
- Whether they are in favor of using digital media in their writing courses.

After preparing the survey, I emailed faculty members at both schools, asking if I could visit their classes and conduct the survey on iPads that I would bring to class. Students also could choose to complete the survey on their own devices through a link written on the whiteboard of their classroom at the time of my visit.

I surveyed university classes taught by English department instructors who agreed to participate after I reached out to them via email. One of the instructors who agreed to participate allowed me to survey two classes, and I surveyed two other classes led, respectively, by two other instructors. For the tech college classes, I emailed a writing instructor my thesis adviser had met at an academic program. He agreed to help and allowed me to survey two of his classes. He also found two colleagues who each were willing to let me to survey one of their classes.

To gain a deeper understanding of college students' digital media practices in academic settings and in their personal communications, students also were asked on the survey if they would participate in a face-to-face interview. About 14 students at the university and about 20 at the tech college said they would help, providing a phone number or email address to contact them. Eventually, two

from the tech college and three from the university agreed to meet me for an interview. A digital audio recording device was used to record the interviews.

I asked each of the students approximately six questions, seeking information about their age and hometown, and specifics about their digital media use in their personal lives as well as in class. Through the interviews, I hoped to learn personal anecdotes that would bring color to the numerical survey data as well as get a more complete understanding of their interactions with and feelings about using digital media in class and in their personal lives.

I also interviewed seven faculty members—four at the university and three at the tech college. Besides interviewing the six instructors who allowed me to survey their classes, I also spoke to a university instructor who was not teaching first-year writing that semester but does teach the course regularly. As with the students, I asked the instructors about six questions, seeking demographic information as well as their explanations of the extent to which they encourage or require digital media use in their classes as well as their own social media practices. I also used a digital audio recording device for the faculty interviews.

I deemed it important to talk with the instructors for several reasons. I thought the interviews would provide viewpoints that would fit in a complementary fashion with their students' answers; test the accuracy of stereotypes some people may hold about teachers' technological skills; and help me form an accurate portrayal of a first-year writing classroom at these schools in this geographic area.

A total of 79 university students and 74 tech college students agreed to participate in the survey, although the totals on particular questions varied. I

chose not to ask for specific demographic information from the students because I wanted to focus on more general conclusions to be drawn about college students at the respective institutions.

I have combined answers to survey questions, including percentages for particular answers, with comments from the students I interviewed. I've divided the sections into students' personal media use, high school experiences, and college experiences, and the experiences and views expressed by their instructors.

#### IV. RESULTS

##### Frequent visits to social media

The college students I surveyed stay true to the national findings about millennials' frequent use of social media platforms from standpoints of the number of services they frequent, the time they spend there, and the varied media they create and see or hear. In short, for this group social media engagement is more than a sometime thing. Presented with a list of 10 social media platforms and asked which ones they visited at least weekly, nine of the 10 choice

s were selected by at least 10 percent of the 67 university students and 73 tech college students; only LinkedIn garnered less. Plus, a handful of other sites not on the list, including YouTube and 4chan, garnered mentions.

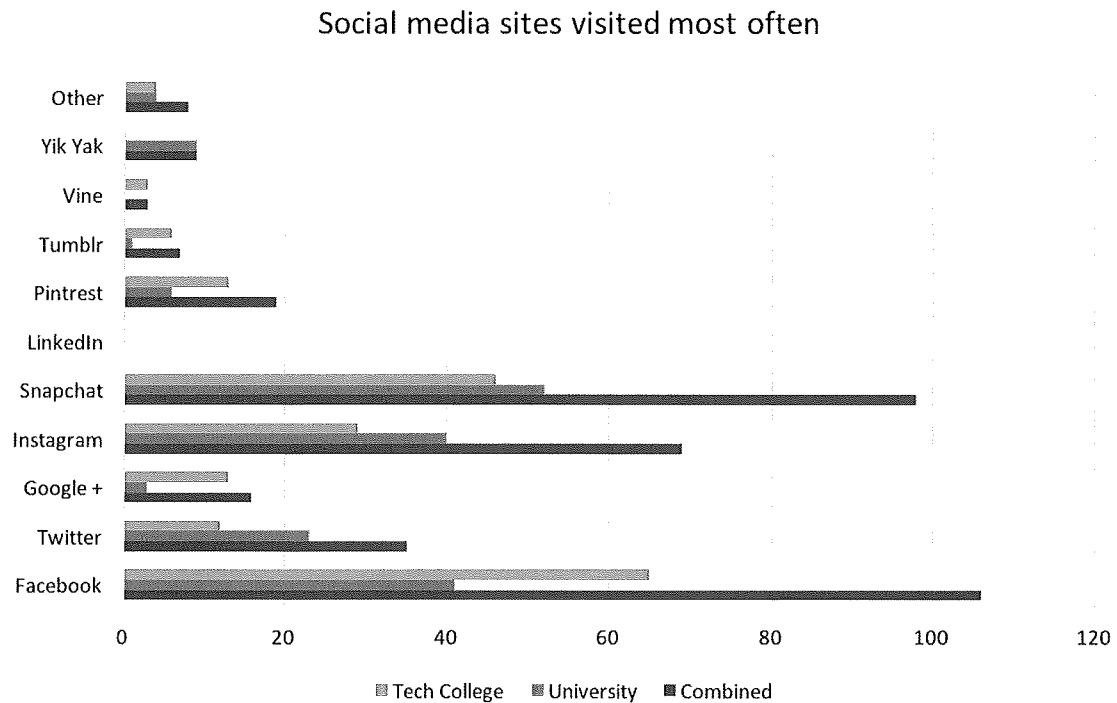


Fig. 1. Social media sites visited most often. Source: Research by William Foy.

Asked to choose favorites from the list of platforms, the visually oriented services were the most popular: Facebook, Snapchat, and Instagram.

The visits are more than quick glances. In total, more than two-thirds of the respondents spent more than an hour a day on social media. Nearly 35 percent of the students spent more than two hours a day engaged in social media, and nearly 33 percent up to two hours a day. Nearly 20 percent spent up to an hour a day, and not quite 13 percent spent a few hours a week or less on the platforms.

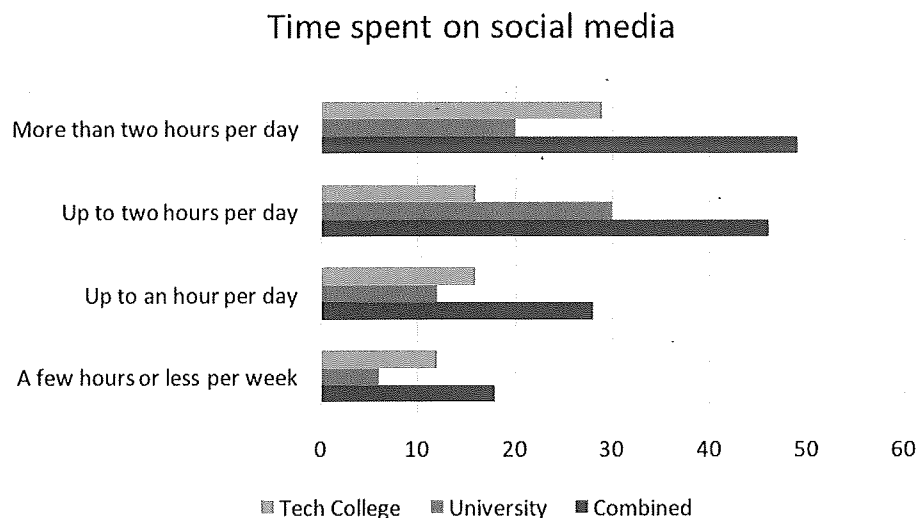


Fig. 2. Time spent on social media. Source: Research by William Foy.

Interviews with five of the students surveyed reveal not just the prodigious amounts of time they spend on social media but the prominent place these forums hold in their lives. “Usually I check Facebook when I wake up and when I go to bed,” says Dan, a 25-year-old tech college student from Eau Claire, who

estimates his social media time at up to a few hours a week; Facebook and Snapchat are his main go-to's. "Or if I'm sitting around idly waiting for something, I'll scroll through." (All students and instructors interviewed for this paper are referred to by first name only or a pseudonym.)

Similarly, Peace Lily, a 19-year-old university student from east-central Wisconsin, checks her smartphone "right when I wake up," she says with a laugh. "I know it's not good, but I do." Facebook, Twitter, and Instagram as well as Snapchat, Tumblr, and Yik Yak are among the sites she visits in her daily two-plus hours of social media time. Those moments include the end of her day as well as the start, and then "just randomly. ... When I don't have anything to do, I'll just look. It's more because I'm bored, if I have nothing to do. Or to procrastinate homework sometimes." While no other students acknowledged as much, it's easy to imagine Peace Lily has plenty of company when it comes to using social media as a tool for procrastination — and not just among millennials.

Other students report similar patterns of usage. Terri, a 31-year-old tech college student from the Eau Claire area who spends more than two hours a day on social media, primarily Facebook, says she checks after waking up, upon returning home and during breaks in her day. It's a similar routine for Camille, a 19-year-old university student from Minnesota. Her hour or so a day with social media includes Snapchat and Instagram, "just to be involved in my friends' lives," as well as Pinterest and Facebook. Besides the morning and before-bedtime checks, she uses it to pass the time during her day. "If it's really cold out, I'll wait for the bus and then I'll check out all the different snap stories, Instagram," she says. "And then while I'm on the bus, maybe check out a couple of Facebook

videos.” She especially enjoys features called Tasty videos, which present quick and easy recipes.

Based on survey responses, students are active sharers as well as viewers/listeners. Overall, nearly 96 percent of survey respondents have posted photos, and about 67 percent have shared video. In addition, about 28 percent have posted hyperlinks; 18 percent, cartoons; and 13 percent, audio files.

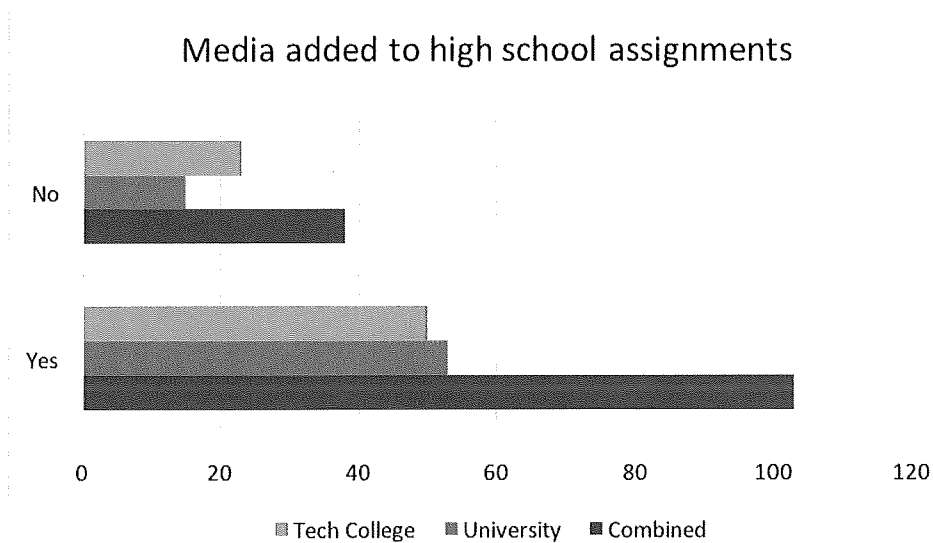


Fig. 3. Media added to high school assignments. Source: Research by William Foy.

### Multimedia use in high school

Overall, nearly three-fourths of students say they had been asked to use multimedia for a high school class assignment. About 73 percent answered affirmatively. Looking at the two schools separately, more university students say they had used media than did their tech college counterparts, 78 percent compared with 68 percent. But it's clear that students are bringing familiarity with multiliteracies to the postsecondary level.

The number of students reporting no experience with using multimedia in high school class assignments—22 percent at the university and 31.5 percent at the tech college, respectively—can be a reminder to college instructors that students aren't bringing to their classes equal amounts of experience with utilizing digital media for academic work.

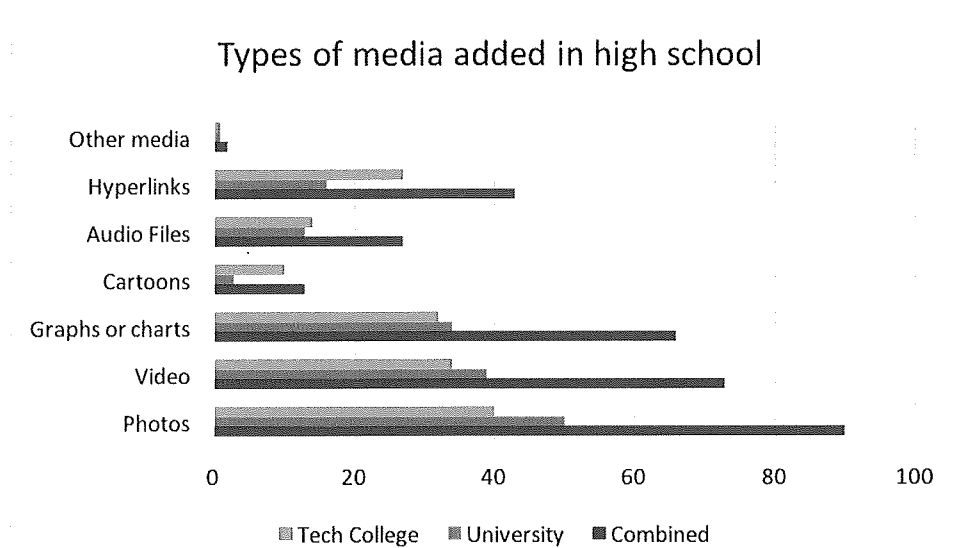


Fig. 4. Types of media added in high school. Source: Research by William Foy.

As for which media, the 52 university students and 49 tech college students who answered this question mention photos and video frequently as elements added to high school assignments.

The responses compare closely to those for the question of media shared in their personal lives, at least when it came to the top selections. Overall, nearly 90 percent of survey respondents who have incorporated media into high school assignments had added photos, and 72 percent say they had added video.

Unsurprisingly, some digital media forms apparently lend themselves more to high school classwork than to personal sharing. That is, more students used the following more often for school assignments than on social media: hyperlinks, about 42.6 percent to 28 percent; and graphs or charts, about 65 percent to 9.5 percent. The reverse was true with cartoons, about 18 percent to 13 percent. However, audio files apparently were used more often in classwork, about 27 percent to 13 percent.

Students' use of multimedia in high school apparently was more than an isolated occurrence. In total, 47.5 percent had used media five or more times, 28.7 percent up to four times, and nearly 24 percent up to two times.

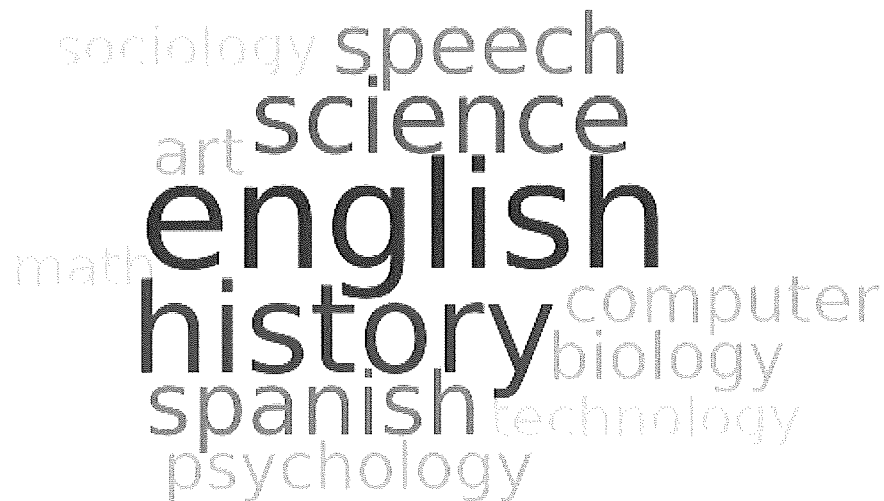


Fig. 5. High school classes with media added. Source: Research by William Foy.

Considering how often students used digital media for classwork, it shouldn't be surprising that a multitude of courses facilitated use of such media.

A plurality said they presented digital media in English class; also drawing mentions were other courses considered the purview of English, including writing, sports literature, and language arts. The following also received multiple mentions: history, Spanish, psychology, science, social studies, business, and mathematics.

One university student gave the following response to this question: "All of them ... iPads were our books and source for everything." Another student said almost all high school classes involved use of digital media.

Asked whether it was their own or their instructors' idea to add multimedia to assignments, the smallest percentage of students—just less than 10 percent—said it was their idea. About 26 percent said it was the instructor's idea, and the highest percentage, nearly 64 percent, said it varied.

All five of the students I interviewed report they used digital media for high school assignments. Among the tech college students, Dan says he employed digital media; to the best of his recollection it was English class. Terri says high school classes for English and science included use of such media.

The survey revealed that, in many cases, presentations rather than written assignments called for digital media. Julia, a 19-year-old university student from the Twin Cities area, recalls using digital media for three high school classes as well as "a lot of presentations." Peace Lily remembers doing a presentation on physician-assisted suicide for an AP U.S. government class.

Camille mentions two examples of her high school integrating multimedia into assignments. One case was a Facebook campaign her high school launched to fight cyberbullying. “That was really big in high school,” she says of the anti-bullying efforts. Then, for a class, she was asked to create a Facebook profile of a historically important figure, which included posts of something they would say. She chose Holocaust survivor and author Elie Wiesel.

### Multimedia use in college

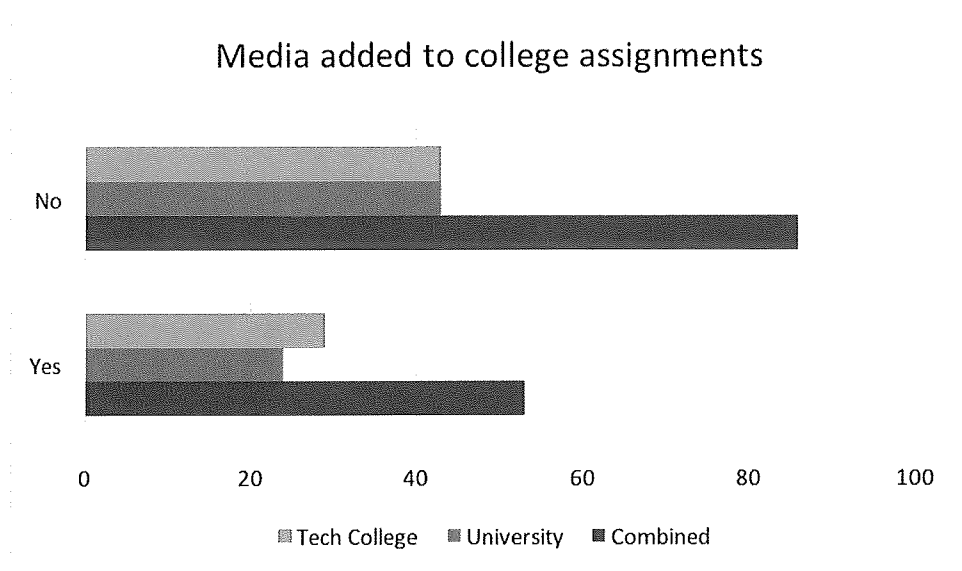


Fig. 6. Media added to college assignments. Source: Research by William Foy.

Significantly fewer students have added media to college assignments than for high school classwork, to judge by the 23 university students and 29 tech college students who answered a yes-or-no survey question about media use in college. Combined, about 38 percent said they had done so, and nearly 62 percent

said they had not. Those figures stand in contrast to the high school numbers of 73 percent yes and 27 percent no.

The responses show a similarity between the media they added in high school and have utilized, so far, in college. Among the overall number who have used media for classwork, about 79 percent have used photos, 56 percent video, 44 percent graphs or charts, and 35 percent hyperlinks.

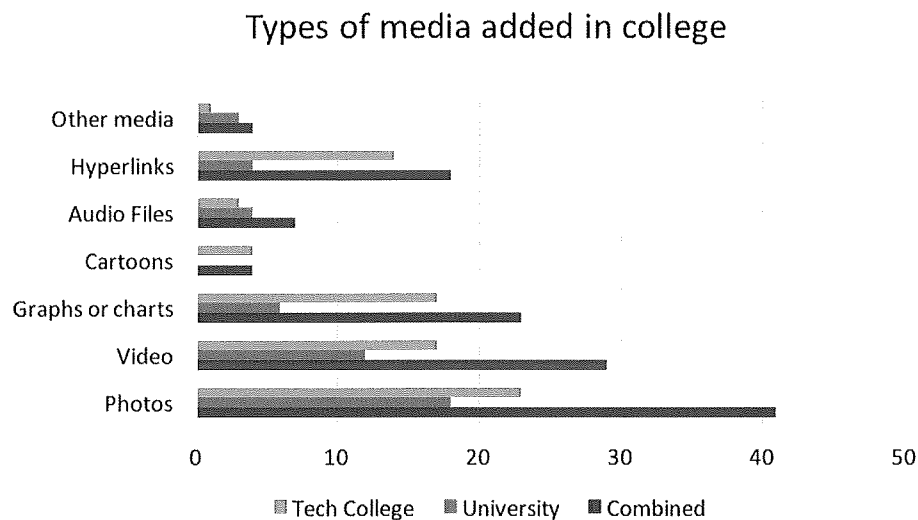


Fig. 7. Types of media added in college. Source: Research by William Foy.

Most of those students, about 54 percent, who had used media for college assignments did so two times or fewer, and the smallest percentage, 15 percent, had done so up to four times. Thirty-one percent used media five or more times.



Fig. 8. College classes with media added. Source: Research by William Foy.

The writing course was not among the classes university students used digital media for, even though all four university instructors I interviewed described various ways in which they incorporated multiliteracies. The most likely reason for the discrepancy is that students were surveyed early in the semester, before they had reached the assignments related to multiliteracies. In contrast, 12 tech college students selected English or communication class as the place they incorporated digital media, making it the most-often selected course area for this survey question.

Looking cumulatively at the survey data, instructors in science classes also apparently ask students to make use of digital media. Psychology, for instance, garnered four mentions, and other courses listed from the scientific disciplines

were geology, biology, anatomy, physiology, and computer science. But humanities courses other than English also appeared among students' selections. Some of the courses cited were sociology, Spanish, American Indian studies, history, and social services. Beyond the courses' specific orientation, several students said that "any course" that involved a presentation utilized digital media.

Few, or about 8 percent, said using media in a college course was solely their idea, similar to the response given for the same question related to high school. Most, or about 54 percent, said it was the instructor's idea, and about 38 percent said it varied.

All but one of the five students I interviewed point to at least one case in which they integrated digital media into an assignment. It mainly involved a presentation. Julia, a native of the Netherlands, was preparing for a presentation in a Spanish class, for which she planned to discuss her arrival in the U.S.; photos were to be a central part of that presentation. As she explains the power of images, "You get more emotion out of people that are listening to your presentation because they are able to see actual images and listen to actual people." Peace Lily had presented on women of the civil rights movement, incorporating photos of such key figures as Vivian Malone Jones, one of the first two African-Americans to enroll at the University of Alabama.

Both of the tech college students interviewed mentioned digital media use as part of assignments. For a rhetorical analysis, Dan wrote about comments by Bernie Sanders, U.S. senator from Vermont and former Democratic presidential candidate. Dan emailed a link to a YouTube video of the politician to his

instructor. "It's definitely nice to have that option for that assignment to use video because I thought that worked really well," he says. He also was preparing for a research essay on the 1999 school shooting at Columbine High School in Colorado; he planned to use network news footage as part of his work. Terri had just completed a presentation related to an essay she wrote on dying with dignity. "I like controversial," she says. That five-minute presentation, she says, included "photos, graphs, maps, and pictures of elderly, terminally ill patients with the caregivers or families — humanizing it." Terri says she is comfortable putting together PowerPoint presentations but "wouldn't mind" learning more about other ways to integrate digital media into assignments.

While not all those interviewed say their college instructors made extensive use of digital media, some students say such efforts have served them well. "I don't know about me using it, but I like it when my teachers use it," Dan says. By his count, four of his five current instructors use digital media, with math the lone exception. "There's kind of the stereotype that old people aren't great at (using technology), but the four that use it use it pretty well," he says.

Peace Lily mentioned one example of digital media, from a physics instructor, that made a strong impression on her. During a study of tides, the teacher showed a video illustrating the waters' varying activity. "There was an exam question on it, and I just remembered that video, and then I got the answer right." Her experience raises an additional benefit of computer-generated media: It accommodates students' preferred styles of learning. "I think sometimes you need a visual thing to help you remember," she says. "That's how I am, at least."

### **Qualified assent**

The final question of the survey asked whether students were in favor adding digital media to class assignments, and they responded affirmatively—resoundingly so. Of the 62 university students and 67 tech college students who answered the question, most favored such a practice. Specifically, just 3 percent expressed opposition, about 74 percent answered affirmatively, and 20 percent said such use depends various factors. But the open response format reveals qualifications in students' answers regarding the levels of enthusiasm and the extent to which they believe such practices are appropriate.

Some students appeared excited about bringing the visual orientation of their social media practices into the classroom. Others express cautious endorsements, and still others appear to be grudging in their approval. (Some of the responses below have been lightly edited to fix typographical errors.) The largely positive verdict would seem to be in line with students' prodigious use of social media in their personal lives. That connection is obvious in some cases, such as the following statements:

- “Yes it’s part of everyday life so we should start adapting to it in a positive way!” (university student)
- “Yes, students relate to it more. We get bored with only speaking or reading text during lectures.” (tech college student)

Answers such as those suggest that students believe alphabetic-based instruction won't cut it anymore.

Other responses, whether endorsing or opposing use of multimedia in classwork, fit with theories related to multiliteracies. One answer, for example,

would seem to reflect Ong's idea of secondary orality, in which electronic communication creates unity as opposed to print's tendency to isolate:

- "I think it is a good thing because it can bring an interactive aspect to the class and share what you do in class to the people on social media." (university student)

Others spoke directly to the NLG's assertion that multiliteracies are an asset beyond the classroom:

- "Yes, the world in technology is changing and we need to be informed and updated on this." (university student)
- "Yes. We are a media based society and get our information from a variety of media sources. If we are to be competent and competitive we need to have ample training and practice in the use of media." (tech college student)

Responses of two students touched on young people's attentiveness to their portable devices and social media outlets — although one encouraged teachers to make use of those habits, and the other took the opposite view.

- "Yes. Because students are already on their phones and Internet enough the way it is." (tech college student)
- "It depends on the media. If it is relevant to class then yes but otherwise I don't think so because normally media doesn't relate to our studies and kids already overuse media." (university student)

Those opposed to making greater use of multiliteracies in classwork appear to have noticed some of the more heated debates about media in the public sphere as well as academia:

- “I feel like adding media to class assignments can be a risk; some information can be reliable while others are not.” (university student)

The reliability of information gleaned from the Web has long been a concern for educators, researchers, and other discerning readers. Additionally, while the student commented well before the deceptive employment of “fake news” took center stage during the 2016 presidential campaign, the response also could apply to that controversy.

The digital divide came up in a response from a skeptic of integrating multimedia:

- “I do not agree. I think that media and class should be separate. It would change who becomes a student.” (tech college student)

While the comment doesn't specify whether the implicit divide would be based on age, economic status, or some other factor, there is value in warning about the potential drawbacks of expanding use of multimedia in academia.

Another hot-button issue when it comes to the online sphere, privacy, was raised:

- “It really depends, because if it's an essay or research project, the person adding social media with their project can get their assignments stolen by another person.” (tech college student)

However, it would be interesting to get some clarification about how this student thought such a theft would be perpetrated.

Some answers give voice to challenges that a multiliteracies pedagogy poses for instructors:

- “Yes and no it can be beneficial but distract from face to face learning.” (university student)

That’s an astute concern, but a skeptic may note that students themselves sometimes distract from face to face learning by attending to personal messages such as texts and emails during class.

One answer suggested another potential pitfall of multiliteracies:

- “No. It’s fun but hard to relate back to the classroom.” (tech college student)

Many writing teachers apparently disagree, but the answer calls out for a need for instructors to tell their students explicitly why multiliteracies initiatives are relevant.

Among students who expressed mixed feelings about multiliteracies, several say that digital media work well with presentations:

- “Yes. I think that it can make assignments like presentations more interesting. Also, I feel it can be beneficial to provide a variety of sources.” (tech college student)
- “I think that most PowerPoints are what should have media added to them because they look better with something added to them. So I agree that some assignments should have media but it depends on the assignment.” (tech college student)

One respondent specifically excluded a writing assignment from the list of subjects suited to digital media:

- “It depends on whether the assignment could be supplemented by visual aids and whether the assignment is an essay or not, as in an essay it would not be useful.” (tech college student)

Such an answer suggests that instructors not only have the task of explaining the what and how of multiliteracies, but also the why.

### **Instructors' work with multiliteracies**

True to Dan's observation about his teachers' digital media savvy, the seven instructors I interviewed all have embraced multiliteracies, to varying degrees, in their teaching.

In some cases, their motivation is the sheer ubiquity of computer-generated communication.

“The world is moving to technology,” says tech college instructor Marie, 49, who has taught at the college level for 23 years. “We all have to get up to speed with it.” She makes use of multimedia for source citations in her written communication and oral communication classes. She also has students incorporate hyperlinks in their writing; for presentations, they must offer a visual or audio representation of the source, such as a PowerPoint slide or voiceover narration. In addition, she has students upload video to YouTube and makes use of the MP4 format for class assignments.

Tech college instructor Robert, 54, marvels at students' attentiveness to their computers. “This is their world,” he says with a smile. “My gosh, when you see them in class, I tend to lose them with their devices.”

He says he requires students to use multimedia “minimally” but outlines several ways in which technology comes into play during his classes. The 22-year veteran of the college classroom says he requires students to access materials at Edvance360, the course management system the school uses, and through emails. He also compliments the college’s database resources, such as collections of films and TED Talks. Moreover, he’s eager to tap into students’ interest in multimedia forms through more sophisticated tools. A couple of years ago he activated a Twitter account, intending to incorporate it into the class. “I had a few students that logged in,” he says but acknowledges he didn’t make full use of the initiative. In another case, students in a composition class that dealt with literature created a Facebook page for characters from “Alice’s Adventures in Wonderland.” The page included allusions and references to the work, and the story’s characters contributed posts. “It was very creative,” he says.

Mr. Kaplan, a 48-year-old university instructor who has taught at the college level for 24 years, suggests that understanding multimedia is required to be fully literate. “I think, especially in today’s culture, it’s imperative that students can understand texts, images and technology,” he says. “That they understand them, that they’re able to utilize them and capitalize on them. It keeps them current. Plus, they like it.”

To that end, Mr. Kaplan uses multiple strategies to integrate digital media. As one example, for student presentations he uses Padlet, which the company calls a “digital canvas” on which students can place elements such as film clips, screen shots, graphics, or other elements. He also uses the course management system Desire2Learn as “the vertebrae” of his courses.

### **Career benefits for students**

Other instructors realize that, to help prepare students for challenges in the workplace, it's essential to familiarize them with electronic modes of communication.

“(T)he facility of using digital media is required in most positions, and my goal is always thinking about what they’re going to do on their jobs and help them learn skills for that,” says tech college instructor Renee, 49, who has taught at the college level for 25 years. Renee encourages students to find images that support and explain the written assignments involving research, and she requires them to deliver presentations that incorporates images. “They must use some kind of image so that we can see what they’re talking about,” she says.

Abby, a 35-year-old university instructor who has five years’ experience teaching at the college level, also notes that multiliteracies play a key role in career preparation. “I think if you just are writing papers and traditional essays, once you leave college, unless you continue in academia, you’re not going to write a paper again,” she says. “But you may be called to upon make a Prezi (slide presentation software) or make a video or create a website. It just seems a lot more useful, I think, in terms of real world applications.”

With that philosophy in mind, Abby requires that students in her first-year writing class present their research through a digital platform. They can blog; they can use a program called Storify, for which users can browse through different social media platforms and pull photos or other images into the stories they’re creating; or create a timeline. When students express uncertainty in

tackling digital projects, she emphasizes that, in the first place, technology isn't going away. But more importantly, she adds that students "have to become comfortable and acclimated and understand the sort of rhetorical moves you have to make in a paper you can make digitally. It's the same ideas; it's just a different implementation."

### **Composing and rhetoric**

For university instructor Karen Henry, 55, the use of multimedia elements fits cohesively with the beginning writing course's emphasis on rhetoric. "We are talking about rhetoric, how this course is rhetorical, how it's intentional, how it's got an audience, and those concepts need a context," says the 25-year veteran of college-level teaching. She contextualizes visual elements by, for instance, making sure students don't simply drop a photo, graph, or hyperlink into a project but make it clear how that evidence contributes to rhetorical concepts such as logos or pathos. Students get such opportunities to work with multimedia in assignments such as creating a mini-magazine; that task also highlights the collaboration multimedia can make possible.

In so doing, Karen Henry says, she ensures that the alphabetic forms still have a prominent place in the course. "The image can't stand by itself, so they have to write about that image," she says. "So then they need to think about a couple of things: What does the image say; what does the image mean? So you've got different levels of description and then analysis that can be brought to talk about the image that then it becomes writing."

Of all the faculty interviewed, university instructor Rudolph, 49, expresses the most skepticism about utilizing digital media. "You could get through the class without using digital media for anything," he says. But his students take advantage of opportunities he offers them. He had recently watched two days of presentations from students, and all of them had used some type of digital media.

Rudolph's ambivalence stems from his doubts about whether the practice is necessary. "I've not convinced myself yet that there's much difference between using digital media in the classroom and using the more traditional forms," says the 23-year veteran of the college classroom. However, he quickly brings up a justification for multiliteracies pedagogy: teaching the rhetorical concept of audience. "It's not a distraction in the sense that when my students think about this final project ... and they choose a particular audience, they know that as an audience themselves that they don't want to read a research paper," he says. "And when we think through a variety of audiences, we almost never come up with an audience for them that wants to read a research paper either."

As indicated by comments shared in previous pages, many of the students and faculty note the sheer fun of working with images. But that begs the question of whether students have grasped the rhetorical complexities involved in their use. Specifically, can they take the lessons learned through overt instruction and critical framing, to use the NLG's terminology, and truly transform their practices? Are they skilled in recognizing the denoted and connoted messages in a still or moving image? Do they understand the difference between Selber's categories of functional, critical, and rhetorical literacy? The instructors acknowledge challenges in that area.

Karen Henry has found that students sometimes lack observational acumen when they are asked simply to describe what is in an image, albeit a complex one, presented to them. "It's hard for them to not bring in presumptions or try to create a story about it," she said, acknowledging that when she was a student she had difficulties with such an exercise as well. Another multimedia shortcoming, she finds, is that proper email etiquette is lost on some students.

While students certainly are familiar with electronically generated images, Mr. Kaplan, says, that's not the final goal. "But it's not really until they kind of pick away at it in the (writing course) that they realize how they can positively harness this to be a more effective communicator." To reach that goal, he says, "You certainly have to scaffold it if it's going to work out well."

When it comes to students' comfort level with digital media, there is a range, Abby says, suggesting that students' facility with media in their personal life may not transfer to their handling of texts for academic purposes. "There are students who I think are probably really adept in their social lives downloading a new app and figuring out how to use it," she says. "And for some reason, when it becomes part of a class assignment, they're not exactly able to connect the dots. And I kind of have to talk them through it a little bit because they do know ... more than they think they know, I guess."

Abby has found that students are well-served by learning to solve some of their own problems with operational tasks. "I don't give them a ton of assistance in terms of training the on the programs," she says. "I feel like part of digital literacy is troubleshooting and learning how to do certain things." Experience may in fact be the best teacher, her approach suggests.

Rudolph wonders whether students, as a rule, possess advanced technical skill. He acknowledges their rapt attention to their devices, saying “I have to make a point of stopping them from texting during class, from looking at Facebook, what have you.” He also is impressed at the way students have learned to use filmmaking apps for class assignments. But when it comes to critical and rhetorical literacy, “I don’t know if they’re more savvy than I would be or if anyone else would be,” he says. “I think they might be unconsciously, but I don’t think they are consciously.”

Marie finds that students don’t necessarily understand how to take the leap from personal to academic and, later, professional communication with multimedia forms. “I think they believe they are more comfortable than they are because it still takes quite a bit of teaching time to get them up to speed with producing something that’s usable by all audiences,” she says.

Her tech college colleague Renee makes the same point. “I’m not sure that they understand how to translate the skills they have in social media into another setting like an academic setting or a professional setting.”

Robert has found another manifestation of the disconnect between social media practices and classwork. During the current semester, he was not using any textbooks, instead having students access materials online. But it turns out they prefer having the printed materials provided to them. “(W)e find that ... even with all these mobile devices, having them do something electronically can be a challenge if they’re not here on campus to access our site,” he says.

Beyond questions of rhetorical understanding, multimedia can uncover varied levels of technical know-how. In that respect, instructors have found an

interesting contradiction: Students often can help solve equipment malfunctions in class, but their sophistication may be lacking.

The idea of relying on students for a quick fix represents students and teachers truly learning together, and everyone involved appreciates it.

"I always find out who my IT students are from the very beginning," Marie says. "The students appreciate you asking. You learn from them as well as they learn from you." Adds Karen Henry: "It becomes collaborative. There's usually somebody who knows how to do it."

### **Clearing hurdles**

As for the instructors' own ability at working with multimedia, they contradict the stereotype of technophobes intimidated by their students' technological mastery. All of them express confidence, albeit to varying degrees, in their ability to use technology in their classroom. Karen Henry, for instance, says it's difficult to imagine not taking advantage of the resources. And while they have been happy to rely on students occasionally, most of the instructors say they have been able to resolve issues eventually.

In evaluating the level of help from the respective schools' tech services departments, the university instructors' comments ranged from "fantastic" to "I honestly haven't utilized it that much," and the tech college's instructors' responses included "helpful to the extent they can be" and "I'd say very high."

Instructors' own social media use, their time and the platforms they use vary. "My phone is my life," Renee says with a smile. And Abby says, "I'm pretty active on social media." Robert and Mr. Kaplan say social media isn't a high

priority for them in their personal lives, and Rudolph raises philosophical misgivings about devoting too much time to online interactions with friends. “I don’t have any appreciation for communicating with people that way,” he says. “I don’t want to find out what people are doing on a minute-by-minute or hour-by-hour basis. My argument is the old kind of dialectical argument, which is, I don’t use Facebook not because I don’t care about communication, but because I really care about communication.” While Rudolph was referring to his personal communication, quantity vs. quality could be a useful dichotomy when discussing students’ efforts in the multimedia realm as well.

Despite the students’ and instructors’ familiarity with technology, the teachers note that fully integrating a multiliteracies pedagogy requires overcoming obstacles. The economic challenges some students face create one such hurdle. Rene has taught online classes in which some students don’t have computers or internet service. “So they go borrow, they go to a public site, a library or something like that where they can use it,” she says. “But in my classes I frequently have students tell me they don’t have access to anything other than dial-up so they can’t download my videos or other problems associated with that. Kind of mind-blowing when you think about it.” Asked if such students still complete the classes, she replies, “Not very successfully.”

Robert has seen such hardships as well, saying he’s seen some in his class who face a “paycheck to paycheck kind of thing.” As with Renee, Robert finds that those students face logistical challenges in completing assignments when they can’t access the necessary resources unless they’re on campus.

Another stumbling block, Rudolph acknowledges, centers on how multimedia work should be evaluated in a course that conventionally involves written compositions. While he knows the goal is to apply the same critical standards to any work regardless of media, he concedes he may grade multimedia works with more leniency. "If they write a paper, I feel like I know the rhetoric of that inside and out and I can give them good feedback," he says. "On the other hand, if they do a pretty good iMovie, I think, wow, they figured out how to do iMovie and did a pretty good job of it."

There also is the obstacle of time limitations. As Renee says, instructors must adhere to the school's goals for the class, irrespective of multiliteracies. "There's a lot to do in those courses, especially the freshman writing courses, and just to get through all of that is a challenge, let alone teach the technology," she says. Robert, as well, notes the time crunch, which he characterizes as "just not having the time to play around and get more comfortable with it."

Marie notes the challenges of updating classroom instructions as equipment or programs are updated. "Documenting all the steps is sometimes cumbersome because, just when you have the perfect document you think everyone will understand how to go about following it and getting to whatever it is that you want them to produce, something changes ... something within the application," she says. "It might be something little, but it changes the whole makeup of your instruction."

The degree to which instructors implement multiliteracies in the classroom may depend on their own comfort level. As Abby says, "I think there's resistance on the part of some instructors if they themselves are not comfortable. I don't

want to be ageist ... but I think there is a little bit of resistance in terms of, 'I didn't use this when I was in school and I'm this accomplished scholar now.' ” She acknowledges that she could be susceptible to such a mindset. “When I was in school ... I had email, but there is no way I ever did any research for a project or a paper online. I always had to go to the library.”

But one possibility for instructors is drawing confidence from their advances and accepting their limitations. Karen Henry mentions the learning curve she needs to navigate. She recalls the days of feeling uneasy about taking on whatever new technology was the rage. But she adds, “It feels natural to me now.” Mr. Kaplan says the only obstacles he can think of are “my own shortcomings in not understanding the media.” But he says, “I'm OK with that. I've done everything else at a turtle's pace, so why change now? I'll get there. It's just that you're going to have to wait a while.”

That willingness to tackle such challenges seemed apparent throughout the interviews when this question was addressed. As Robert talked about the difficulty of working with students of dramatically different skill levels, he thought about an assignment that involved creation of a website. While not all the students successfully handled the rigors of the assignment, others “were really strong.” Moreover, he commented several times that being asked to participate in this research has encouraged him to consider making greater use of multimedia in his classes.

## V. DISCUSSION

### **A good place to start**

In setting up a comparison between students' digital media use in their personal life and in course work, my motivation was to find out if college courses in general and writing classes in particular gave students the impetus to, in Cynthia L. Selfe's phrase, "begin the complex process" of composing with multimedia elements. It turns out the students and instructors who participated in my study are well-aware that burgeoning text forms continue to flourish. In the conversation, so to speak, that emerges from the survey and interview data, the consensus speaks loudly and clearly: Communicating in the 21<sup>st</sup> century requires fluency with these design resources.

Students enjoy such media in their personal life, as most of them report they spend more than an hour a day, and often more than that, engaging with these forms. It also appears such interest has extended to their academic lives, as an overwhelming majority favor integrating digital media into assignments, albeit to varying extents. They even appear to understand the importance of a multiliteracies orientation in the careers they are preparing for, to judge by the number who commented on the value of multiliteracies in the workplace.

Similarly, all the instructors I interviewed have noticed how eagerly students embrace varied forms of communication, and they have integrated multiliteracies into their courses and devised strategies to make greater use of these elements.

These practices suggest efforts made toward composing with multimedia, as encouraged by the NLG and national educators groups. That's notable, considering this study deals with beginning writing classes, where the goals and

requirements likely keep the focus on more traditional forms than would be possible in upper level courses, where instructors could try out more adventurous possibilities.

### **Moving through challenges**

To follow up on indications that students and instructors have taken initial steps toward expanding their design palette for classwork, it's worth exploring what kinds of opportunities and obstacles lie ahead in this endeavor. In talking about their respective practices and preferences, students and instructors reveal their ideas about what types of initiatives would advance or, by contrast, impede a multiliteracies pedagogy.

To start with the encouraging signs, all seven of the instructors I interviewed reveal an open-mindedness about how multimedia could be utilized. Methods include rhetorical analyses, identification of sources, blogs, films, or even group projects such as a mini-publication or a Facebook page. Such examples show that educators at these two schools have picked up on what the NLG refers to as the multiplicity of discourses that, to be sufficiently literate today, students must grasp. It appears students embrace such a multiplicity as well, to judge by their personal social media interactions and the different design resources they deploy when instructors give them the opportunity. In other words, it works to give students lots of options.

Expanding design resources does carry a risk, and a few instructors spoke of unsuccessful attempts to integrate a specific medium or platform. But they also noted what they learned from the experience and in some cases expressed

interest in giving such ideas another chance. That suggests instructors need not fear failure when it comes to multiliteracies—or, even more encouraging, it may mean that no strategy truly fails if something is learned in the process.

A third hopeful conclusion that emerges relates to the technical understanding of equipment and processes utilized for multiliteracies: Potentially intimidating challenges about the technology can turn out to be rapport builders and confidence boosters. Many of the instructors say students occasionally help solve technical malfunctions and appreciate being asked. But faculty also point out that some students do need tutoring with operational tasks while the instructors have gained increasing skill, confidence, and patience with the technology despite the initial challenges. These success stories should assuage the concerns of any teacher who is considering whether to introduce multiliteracies into a course but fears the technological hurdles would be too formidable.

### **Potential stumbling blocks**

While students generally welcome doing more with multimedia in class, the survey finds a surprising number who see limited use of such elements. Several say it depends on the assignment or see little potential for such an approach beyond what would liven up a presentation. This idea would seem to depart from the NLG's advocacy of linguistic, visual, aural, gestural, spatial, and multimodal design for a broad range of students' compositions. It also suggests students would benefit from further explanation of how the varied multimedia elements work rhetorically.

To be sure, many students grasp how multiple media elements serve their attempts to communicate an intended message. That was evident in, for example, the respective observations that photos or video humanize an issue, serve as a useful starting point for a rhetorical analysis, make a lesson more memorable, and stir emotion out of audiences. But just as instructors must keep rhetoric in mind for every step in the teaching of writing, so must they with multiliteracies.

Interviews also make clear that instructors clearly understand this necessity, as indicated by classroom strategies they describe, such as: getting students to describe—nothing more, nothing less—what is in a picture; prompting them to recognize which types of media are, in a specific situation, most appropriate for an audience; and reminding them of the contrasting demands in personal, academic, and workplace settings.

Another potential obstacle was apparent in tech college instructors' comments about some students' economic challenges, including lack of off-campus access to the internet. No university instructors mentioned such an obstacle, and further evidence of financial disparities between the two schools can be seen in the fact that 51 percent of tech college students receive Pell Grants, a program specifically designed for the economically disadvantaged, compared with 17 percent at the university. But this anecdotal finding can help remind faculty at both schools some students may face such struggles.

Another challenge instructors identify may be surprising given students' apparent mastery of digital media: students' technological savvy for personal uses but, in at least some cases, lack thereof for academic work. There seems to be little doubt about young people's multimedia fluency when it comes to

communicating with their friends—even to the point of distraction in class. But instructors also say they have found cases in which such expertise comes up short for “connecting the dots” to complete an assignment in a critically or rhetorically sophisticated way.

Such observations call to mind Irene Clark’s argument that a crucial part of transfer involves grasping the differences between personal communication and academic texts. More hopefully, another scholar, Diana George, finds that students’ comfort level with digital media has risen over the years she has been studying their practices.

The varied degrees of facility with technology, and composing with it, in general recall the “inescapably contingent and complicated” encounters Faris and Selber noted specifically for the iPad. That’s not cause for alarm; it’s simply pointing out that guidance and experience—situated practice, overt instruction, and critical framing—are needed before transformed practice can happen.

Surely, it can be considered a victory anytime instructors capitalize on students’ interests in their personal life, as Dewey pointed out, for successful education strategies. But taking multiliteracies pedagogy a step further will require a deeper understanding of, for example, Barthes’ rhetoric of the image, Kress’ complex orchestration of design elements, and Selber’s functional, critical, and rhetorical literacies. When students approach the same level of familiarity with those concepts that they already demonstrate in their favorite social media platforms, they will think more systematically about what they already know, whether it’s reacting to *kairos* or giving *logos* a more prominent place in their

texts. At that point, they will realize that an iMovie or a Prezi doesn't merely wow an audience but provides the best means of making their point.

Cumulatively, the dialogue formed by the survey and interview data speaks to admonitions of two prominent multiliteracies advocates. While Yancey wished in 2004 that students would be as enthusiastic about school assignments as they are with their personal communications, the students I surveyed and interviewed do, in large measure, want to take their social media practices into the classroom, and their instructors want to facilitate that interest.

It's also helpful to remember the NLG members anticipated the challenges inherent in a multiliteracies pedagogy. The dialogue will encounter, they say, "chasms of difference in values, grossly unjust inequalities, and difficult but necessary border crossings" (89). But this study's participants appear to understand that this orientation is not just useful but vital to their personal, academic, and professional lives. What's needed next is for learners and educators to continue the conversation—in whatever digital formats best suit the message.

## VI. LIMITATIONS AND OPPORTUNITIES FOR FUTURE RESEARCH

My research fulfilled the goals I intended to meet, but there are unavoidable limitations. First, the study was limited to two schools in the same region, which prevents drawing conclusions about national trends. Second, the sample sizes of survey and interview participants are not sufficiently large to generalize about the student population at the university or tech college; the instructors at either of the schools; or writing classes at the schools. Third, I chose not to ask for the age, gender, or ethnicity of the survey respondents and instead focused on broader findings about the eight classes involved. That means that no conclusions are possible about demographic variations in survey findings.

I chose to focus on college students' first-year writing classes in my research. A different approach would be to survey students further along in their education, assessing how their multiliteracies skills have developed in later years. Such an approach would discover the extent to which a multiliteracies pedagogy is part of the initiative of individual instructors, for a single course, or whether it is in the broader goals of a department or an entire school.

Furthermore, I surveyed college students but not their writing instructors. Expanding the quantitative portion of this research could uncover more about how teachers are navigating the increasingly complex technological environment in which they teach.

Many of the questions I asked participants in my study involved functional literacy, but this research could be adapted to put more focus on critical and rhetorical literacy as well. For example, a researcher might ask students about instances of adding digital elements to social media posts or assignments and

why they chose such media. Additional avenues in such research could inquire about how clearly students understand the different goals for reaching different audiences, including those in their personal, workplace, or academic lives.

Finally, with technology changing so rapidly in terms of the available hardware and the online services, studies such as this could be updated in relatively few years and possibly find significantly different outcomes and opinions among students and their instructors. Researchers could update findings on topics such as how high schools' multiliteracies initiatives compare with postsecondary schools'; whether students continue to be in favor of utilizing digital media for course work; and individual instructors' comfort level with technological tools of communication.

Despite these limitations, this research shows that instructors and students at these two postsecondary schools recognize the value of integrating a multiliteracies pedagogy into writing classes and are finding strategies to work through challenges and become more fluent in composing with multimedia design elements. That means, to borrow phrases from the NLG, they appear motivated to work with these concepts and believe learning them is in their interest.

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## Appendices

### A. Survey of Students' Digital Media Use

#### CONSENT TO PARTICIPATE IN A RESEARCH STUDY

TITLE: Students' Reported Use of Digital Media in College Writing Classes

INVESTIGATOR: William Foy, graduate student, English Department,  
University of Wisconsin-Eau Claire, Eau Claire WI 54701, 715-864-6600,  
foyw@uwec.edu.

**PURPOSE:** This study focuses on digital media use by college students in social media forums and whether those practices are being transferred to their writing classes. It will involve a survey of first-year composition students at UW-Eau Claire and Chippewa Valley Technical College about their media use in classes and in their social media posts. The study will explore whether classes are engaging students in the multiple literacies that are now widely practiced, including those related to images, sounds, and electronic communication devices.

**RISKS AND BENEFITS:** There are no risks to participating in this study that are greater than those encountered in everyday life. You will not be asked to provide your name on the questionnaire, so you will remain anonymous. However, you can withdraw from participation in the study at any time. While you will not benefit directly from participation, this study will provide data to help in identifying trends in the use of visual or other digital media in students' social media forums and in their writing classes.

**COMPENSATION:** You will not be compensated for participation in this study.

However, participation in the project will require no monetary cost to you, and there will be no grade effect.

**CONFIDENTIALITY:** In any publications and presentations resulting from this research, the researcher may quote from, paraphrase, summarize, and/or share answers to free response questions or compiled statistical data from survey questions. Your name, however, will never appear on any survey or research instruments without your prior consent. Online data, however, is never completely secure. Though Qualtrics does not link the usage data it collects (e.g., log files, cookies) to survey responses, participants' questionnaire data may be accessed or circulated without their knowledge or permission. As Qualtrics states in its terms of service:

"Qualtrics will use commercially reasonable technology, industry best practices to ensure the integrity and security of all Confidential Information with respect to theft, piracy, and unauthorized access." To protect participants' identity as much as possible, the researchers will disable IP address collection for the questionnaire and not ask participants to provide any demographic or personally identifying information. Any downloaded materials will be stored on password

protected computers, and any hard copies of materials will be stored in locked cabinets. This data will be destroyed after five years.

**RIGHT TO WITHDRAW:** You are under no obligation to participate in this study. Your participation is voluntary, and you are free to withdraw your consent at any time, for any reason, by not completing and submitting the questionnaire. However, if you submit your survey answers, even if you do not answer all the questions, the responses cannot be removed because they are anonymous and treated in aggregate.

**SUMMARY OF RESULTS:** A summary of the results of this research will be supplied to participants, at no cost, upon request.

**VOLUNTARY CONSENT:** By clicking to proceed with the questionnaire, you indicate your consent to participate in the study as described. You agree that you have read and understand the above statements and that you are at least 18 years of age. If you have any further questions about your rights and participation in this study, you may call William Foy at 715-864-6600 or Dr. Michael Axelrod, chair of the University of Wisconsin-Eau Claire Institutional Review Board, at 715-836-2373. You may also call Dr. Alan Benson at 715-836-3146. Please print a copy of this consent form for your records.

- I consent to participate
- I do not consent to participate

If "I do not consent to participate" is selected, then skip to the end of the survey

Q1 Which social media forums do you visit at least weekly? Check all that apply.

- Facebook
- Twitter
- Google+
- Instagram
- Snapchat
- LinkedIn
- Pinterest
- Tumblr
- Vine
- Yik Yak
- Other (please list name) \_\_\_\_\_

Q2 Which of those sites do you visit most often? Check up to three.

- Facebook
- Twitter
- Google+
- Instagram
- Snapchat
- LinkedIn
- Pinterest
- Tumblr
- Vine
- Yik Yak
- Other (please list name) \_\_\_\_\_

Q3 How much time do you spend, in total, on social media?

- A few hours or less per week
- Up to an hour per day
- Up to two hours per day
- More than two hours per day

Q4 On the forums that you visit, which of the following media have you included in your posts?

- Photos
- Video
- Graphs or charts
- Cartoons
- Audio files
- Hyperlinks
- Other media (please describe) \_\_\_\_\_

Q5 Drag the items into the order you use them most.

- \_\_\_\_\_ Photos
- \_\_\_\_\_ Video
- \_\_\_\_\_ Graphs or charts
- \_\_\_\_\_ Cartoons
- \_\_\_\_\_ Audio files
- \_\_\_\_\_ Hyperlinks
- \_\_\_\_\_ Other media (please describe)

Q6 Did you ever add media to a class assignment in high school?

- Yes
- No

If No is selected, then skip to Question 11

Q7 Which media did you add?

- Photos
- Video
- Graphs or charts
- Cartoons
- Audio files
- Hyperlinks
- Other media \_\_\_\_\_

Q8 To how many assignments did you add such media?

- Up to two times
- Up to four times
- Five or more times

Q9 For which classes did you add media to assignments?

Q10 Were you asked by the instructor(s) to add the media or was it your idea?

- The instructor's idea
- My idea
- It varied

Q11 Have you ever added media to a class assignment in college?

- Yes
- No

If No is selected, then skip to Question 19

Q12 Which media did you add?

- Photos
- Video
- Graphs or charts
- Cartoons
- Audio files
- Hyperlinks
- Other media

Q13 How many times did you add media to an assignment?

- Up to two times
- Up to four times
- Five or more times

Q14 For which classes did you add media to assignments?

Q15 Were you asked by the instructor(s) to add the media or was it your idea?

- The instructor's idea
- My idea
- It varied

Q16 Does your college use an online course management system such as Blackboard or Desire2Learn?

- Yes
- No

Q17 How many of your professors used the school's course management system to grade and comment on assignments?

- Zero
- One
- Two or more
- All of them

If Zero is selected, participant is taken to Question 19)

Q18 In which classes did you receive grades and comments on assignments via a course management system?

Q19 Do you think it is a good idea to add media to class assignments? Why or why not?

Q20 Would you be willing to further assist this project by speaking to researchers about your answers? If so, please include the best way to reach you, such as a phone number or email address.

## B. Interview questions

### **Questions for students**

1. Demographic question related to age, race, ethnic heritage, family's education level.
2. What are specific examples of visual or other digital media you have added to your social media posts?
3. To what extent do your friends post the same media? The same types? The same amount? More? Less?
4. How do you use multimedia — such as pictures, video, or hyperlinks — to enhance your personal communication?
5. Do you think multimedia would enhance your writing assignments?
6. How willing are your teachers to engage with multimedia?

### **Questions for teachers**

1. Do you require students to incorporate visual or other digital media into any of their written assignments? Why or why not?
2. How comfortable do your students seem to be with regard to multimedia in their class work and personal communication?
3. How comfortable are you with using multimedia in the writing assignments you require and in your personal communication?
4. How comfortable are you when it comes to solving technical problems with electronic devices you or your students use?
5. Does your school offer adequate technical resources to handle malfunctions and usage questions related to computers and other electronic devices?
6. What do you see as the major obstacles to incorporating media into assignments?