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# Using digital media in the classroom as writing platforms for multimodal authoring, publishing, and reflecting<sup>☆</sup>

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## Abstract

This multiliteracies-framed study is an analysis of how English Language Arts students designed digital portfolios across three digital media platforms: Weebly (a website building platform), blogs, and Instagram (a photo and video sharing app). Analysis centers around an examination of students' writing (defined broadly), student surveys, focal student interviews, and a reflective interview with the teacher to understand the research question: How did students use each of the platforms and what did this afford that may not have otherwise been possible in this typically formal and text-based class? Findings indicate that the students designed complex, reflective, multimodal compositions that would have otherwise not been possible with the typically formal, prescribed forms of writing typical to this classroom. Implications for this study include embracing alternative communication styles in classrooms beyond traditional forms of text-based writing to allow for students' out-of-school and in-school literacy practices to be bridged.

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## 1. Introduction

The COVID-19 pandemic and subsequent shift to online education for students around the world highlighted that many educators felt ill-prepared for how to use digital technologies as learning tools (Trust & Whalen, 2020). During and even prior to this shift, teachers and students saw a rapid transformation in literacy practices as their lives became increasingly more globalized and digital. However, some educators struggle with how to effectively engage these digital literacy practices to offer multimodal communication and mirror students' out-of-school literacy practices (Mills, 2009; Shanahan, 2013; Stewart et al., 2021). Therefore, as learning continues to be mediated through online contexts, it is important to understand how students can use digital tools and the potential implications of those uses for authoring in the classroom.

In this study, I examine how students used three digital media platforms (Instagram—a social media photo/video sharing application, Weebly—a website building tool, and Weebly Blogs—a blogging feature of Weebly) to create

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digital writing portfolios in a high school English classroom. The cooperating teacher and I chose each of the platforms for the portfolio based on their potentials for open-endedness, opportunities for multimodal authoring, expanded audience, and familiarity for students as well as the potential for variation across each platform. While this study took place pre-pandemic, findings continue to shed light on the ways in which educators can leverage the affordances of digital tools to engage students.

To understand how the students used each of these platforms and to what effects, I examined students' writing on each, their responses to interview and survey questions, and a reflective interview with the classroom teacher. I found that students designed multimodal texts on Instagram to convey ideas that may not have otherwise been possible in this classroom, showcased their writing on Weebly to extend their work to a larger audience, and expressed ideas informally on their blogs to reflect on their connections to texts—all hallmarks of multiliteracies approach to literacies and writing in the classroom. In doing so, the students in this classroom expanded the typical context of the class to include other kinds of writing beyond the traditional linguistic forms, which can allow for greater meaning-making paths for students (Kress, 2003). In the following section, I discuss how I frame this study through a multiliteracies theoretical lens that focuses on the context of literacy practices with an emphasis on bridging in- and out-of-school literacies.

## 2. Multiliteracies theoretical framework

Multiliteracies refers to the idea that there are many types of literacy practices, not just one traditional way of viewing, enacting, teaching, and learning literacy (Leu et al., 2013; Mills, 2009; New London Group 1996). Under a multiliteracies lens, students' social practices and experiences are valued for their contribution to the meaning-making process, thereby calling for tailored curricula that include and value these practices, which in turn, may lead to more engaged learning practices (Vasudevan, 2006).

While even as recently as two decades ago, writing was seen as the singular textual mode, but many literacy scholars now acknowledge the multimodal nature of texts and the design involved in their production (see Bezemer & Kress, 2014). For many, writing now refers to literacy practices that expand the traditional notions of modes (units of conveying meaning), means, and genre (Mills & Exley, 2014). Multimodality upholds that meaning making is comprised of multiple modes in combination (e.g., text, video, picture, sound, gestures, etc.). Many multiliteracies scholars urge for increasingly effective integration of multimodality into the classroom for more modern and inclusive literacy practices (e.g., Aguilera et al., 2020; Leu et al., 2013; New London Group 1996). Although linguistic modes are traditionally valued in schools (Nelson et al., 2008; Shanahan, 2013), this view is changing as the nature of literacy and what people recognize as literacies change (Lankshear & Knobel, 2003; Miller & McVee, 2012).

Thus, framed by a multiliteracies lens, the conception of writing has begun to shift as more scholars, students, teachers, policy makers, etc. begin to acknowledge and accept a broader definition. According to Breuch (2002), writing has transformed into "an indeterminate activity rather than a body of knowledge to be mastered" (p. 139), which is tied to social, political, and systems (Bezemer & Kress, 2014; Kress, 2003). As more people involved in education begin to shift their understandings of what writing can be, what it means to write, and how writing is framed, literacy education can expand beyond the traditional views of print-based writing that is confined to the space of the classroom. Through online authoring like blogging, which forwards interactive, reflective writing using multiple modes, scholars have highlighted these benefits for years (Stewart, 2015).

Therefore, multiliteracies scholars aim to move educational literacy practices from traditional, formal, print-based texts to open-ended, multimodal forms of communication that are more informal, offer diverse paths for literacy practices, and require students to critically engage with the meaning making process (e.g., Bialostok, 2014; Kellner & Share, 2007; Mills, 2009). To do so, however, requires a "radical revamping of literacy curriculum and instruction in public education systems around the world" (Mirra et al., 2018, p.13). Studying the context in which a teacher who typically adheres to formal, print-based literacy practices embraces a multimodal project wherein students' out-of-school literacies (or practices not often valued in schools, i.e., web design, posting to social media) are included can shed light on what students are able to do when such revamping begins to take place. However, taking something that is typically used for pleasure like social/digital media for use in the classroom needs to strike a balance between student engagement/interest and pedagogical goals (Burnett & Merchant, 2011; Pangrazio, 2016).

Table 1  
Examples of Features of Each Platform.

Weebly pages	Blogs	Instagram
text, picture, embedded documents, themes, pages, layout	text editing, picture elements, hyperlinks, layout	pictures or video settings, filters, hashtags, photo/video editing

Using digital tools and acknowledging the nuances of various digital/social media platforms (Black, 2009; Buck, 2012; Stewart, 2015) can help to blur the lines between private and public displays of identity (Luzón, 2018) and the literacy practices at work to construct that identity. Students may choose to represent themselves differently based on the social constructs and affordances of a platform (Buck, 2012; Lammers & Marsh, 2018; Ramírez, 2011), and thus, exploring students' use across three varying platforms can help to better illuminate these nuances. For example, Buck (2012) explored the ways in which one person represented himself in strikingly different ways across multiple platforms based on the social constructs of each. She posits that “writers engage in sophisticated literacy practices in order to present different aspects of self...on social network sites” (p.15). Furthermore, in her study, Ramírez (2011) found that audience, reflection, and interactivity affect students' “eperformances” in eportfolios.

This study adds to the growing body of multiliteracies-framed research attempting to understand the pedagogical implications for when social/digital media are used as classroom tools to mediate literacy practices (see Stewart, 2015). Specifically, this study demonstrates how adolescent learners harness the capabilities of digital tools to express themselves and their ideas within and beyond the walls of the classroom to not just consume digital media, but to engage and create it (Mirra et al., 2018).

Because of the open-endedness of many social/digital media platforms, students can remix (use and edit) sourced materials and/or create and edit new materials (Honeyford, 2014). Thus, digital media allow for remixing multimodal texts to express ideas (Knobel & Lankshear, 2008; O'Byrne & Murrell, 2014; Stewart, 2015) and to work across multiple modes to construct meaning in new ways (Edwards-Groves, 2011; Greenhow & Robelia, 2009; Kress, 2003) based on the features of that platform (Buck, 2012; see Table 1 for each platform's features). In turn, scholars look beyond writing (see Anderson et al., 2017; Edwards-Groves, 2011) to explore all authoring practices through sophisticated designing that encompasses multimodal elements. Edwards-Groves (2011) asserted that the design within social contexts like social/digital media allowed students into a new “pedagogic territory” (p. 51) wherein they could more efficiently express ideas through their writing and design. However, to embrace those ideas and designs and open spaces for students' voices in the classroom, “teachers must offer students meaningful learning experiences” (Mirra et al., 2018, p. 16). Thus, it is important to iteratively understand *how* students are using digital media in the classroom and to what effects.

### 3. Context of the classroom

In line with a multiliteracies framework, it is important to understand the context in which this specific study took place. The students and teacher were part of a capstone-level, high school senior English literature class at a K-12 college preparatory charter school in the Southwestern U.S. The school is free, but students must apply and are accepted based on need. Though we had never met before, I began working with the teacher, Ms. Lee (all names are pseudonyms), based on her interest to incorporate a multimodal project mediated through social media into her classroom. Participants included one section of twenty-six 17- and 18-year-old students in their last semester of high school (see Table 2). Most of the students identified as Hispanic, reflecting the makeup of the location and population of the school.

Even though the capstone-level was the advanced version of the senior English course, Ms. Lee characterized it as less rigorous than what one might expect to see in an Advanced Placement course because the school predominantly accepted first-generation college-bound students. Understanding the complexities of this population, the school also provided students with guidance and support through their first year of college.

Because the course was a capstone English Literature class, Ms. Lee characterized her typical assignments as quite formal, requiring students to write literature analyses while citing texts and providing critical commentary, rarely reflecting their voices and interests. This characterization was confirmed in my observations of two class

Table 2  
Student Demographics,  $N = 24$ .

Gender	66.7% Female 33.3% Male
Age	50% 17 50% 18
Race/Ethnicity	58.3% Hispanic 20.8% Caucasian 8.3% African American 4.2% Asian American 4.2% Native American 4.2% Other
Experience with Technology	66.7% “I use it all the time” 33.3% “I use it frequently”
Used Instagram Before	87.5% Yes 12.5% No
Used Weebly Before	83.3% Yes 16.7% No
Used Weebly Blogs Before	29.2% Yes 70.8% No

*Note.* Two students were absent the day that the pre-study survey was taken.

periods before the beginning of the portfolio unit and in the ten I observed during the portfolio unit where even in “fun” assignments like classroom debates, students were still revoicing the texts through their verbal analyses. In a follow-up interview, Ms. Lee reiterated that she deliberately structured her course as more formal and less personal to ensure students’ college preparedness (see [Stewart, 2017](#)).

As a result of the formality of the writing environment, Ms. Lee expressed that she did not know the students as well-rounded people, but more as specific types of academic writers and students in the context of her classroom, even though she had taught this group for both their junior and senior years of high school English. The context that Ms. Lee and the students had created was one where the focus was on analyzing texts wherein the students were relatively removed from personal reflection. However, the unit under study, the portfolio unit, included a moderately open-ended assignment where students chose pieces to showcase, designed their portfolios using multiple modes while working across platforms, expressed personal ideas/reflections, and directed their time as needed.

While I presented the general idea for the unit, Ms. Lee largely spearheaded the assignments and prompts. We initially began planning together, but as she grew more passionate about the unit, my role shifted to offering feedback and providing input on scaffolding based on my expertise in digital literacies. The portfolio unit consisted of writing across *Weebly* (website building platform), *blogs* (blogging platform housed within Weebly but with differing design and interactive features), and *Instagram* (photo/video sharing mobile app). In the eight-week unit, students created digital portfolios reflecting on their literacy practices over the course of their time in school (see [Fig. 1](#) for the assignment). In some sections, students could bring in writing from other courses from any time in their lives; other sections required students to reflect on their writing practices in Ms. Lee’s course specifically. Ms. Lee’s goals for the unit (which she wrote and shared with me) were to have students reflect on their educational journey as they prepared to graduate and “to learn more about how we express ourselves in digital and online spaces”. These goals differed from those she had for the rest of the course, which she expressed in an interview were to prepare students for writing literary analyses in college.

Ms. Lee provided the assignment sheet for the entire portfolio at the beginning of the unit, and students autonomously structured their time working on each section. There were times, however, set aside specifically for the Literacy Memoir, as this was a new essay and required some scaffolding. Ms. Lee impressed upon the students many times that the portfolio was meant to stand alone outside of the class as well, and thus, they needed to consider the larger audience for which they were designing (i.e., those to whom they may present or share their portfolio). This consideration helped to situate the portfolio, especially the Weebly website, outside of the class, an important tenet of multiliteracies. As students designed their portfolios, they then had to consider the focus of readers and the potential interpretations that they may have based on their designs.

NAME	PERIOD				
<b>SENIOR WRITING PORTFOLIO</b> <b>A-Level English Literature</b> <b>DUE FRIDAY, MAY 13, 2016</b>					
<p>Please use the following checklist as you prepare your Senior Writing Portfolio for final assessment.</p> <ul style="list-style-type: none"> <li>• <b>Landing/Home page</b> of Senior Writing Portfolio is professional-looking and conveys the purpose/content of website.</li> <li>• <b>Header/Title</b> of each page is labeled clearly and professionally.</li> <li>• <b>Scavenger Hunt/Sandbox</b> page is hidden as a sub-page under 'About' or 'Home'.</li> <li>• Portfolio is free of spelling/grammar errors and typos, including blog posts.</li> <li>• Portfolio has professional/academic content on all pages.</li> <li>• <b>Portfolio has FIVE (and only five) main sections:</b> <ul style="list-style-type: none"> <li>• <b>ABOUT THIS PORTFOLIO</b> - includes an image/photo representing you and three sections: yourself, your reading, and your writing</li> <li>• <b>ACADEMIC WRITING</b> - includes three items (as sub-pages or all together): <ul style="list-style-type: none"> <li>• <b>Original Essay</b> - Embed using "Document" element or copy/paste into a "Text" element.</li> <li>• <b>Revision of Essay</b> - Provide a download link using "File" element and/or email to Ms. Lee.</li> <li>• <b>Reflection</b> - Answer all four questions.</li> </ul> </li> <li>• <b>PERSONAL &amp; CREATIVE WRITING</b> <ul style="list-style-type: none"> <li>• <b>3 Writing Samples</b> - Show a range of styles and content. Showcase your best writing skills. Revise. Edit!</li> <li>• <b>Reflection</b> - Answer all four questions.</li> </ul> </li> <li>• <b>LITERACY MEMOIR</b> <ul style="list-style-type: none"> <li>• <b>Literacy Timeline</b> - Use the "Embed" element and a code from edu.hstry.co (ask Ms. Lee for help).</li> <li>• <b>Literacy Memoir</b> - Provide download link using "File" element and/or email to Ms. Lee.</li> <li>• <b>Reflection</b> - Answer all four questions.</li> </ul> </li> <li>• <b>BLOG</b> - all labeled with post # <table border="1" style="width: 100%;"> <tr> <td> <ul style="list-style-type: none"> <li>• <b>Blog Post 1</b></li> <li>• <b>Blog Post 2</b> - extra credit</li> <li>• <b>Blog Post 3</b></li> <li>• <b>Blog Post 4</b></li> <li>• <b>Blog Post 5</b></li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• <b>Blog Post 6</b></li> <li>• <b>Blog Post 7</b></li> <li>• <b>Blog Post 8</b></li> <li>• <b>Blog Post 9</b></li> </ul> </td> </tr> </table> </li> </ul> </li> <li>• <b>INSTAGRAM</b> - all labeled with your unique hashtag (Lee + class + First name + Last initial) (Ex: #LeeM2AmberL) <table border="1" style="width: 100%;"> <tr> <td> <ul style="list-style-type: none"> <li>• <b>IG Post 1 #LeeM_sh</b></li> <li>• <b>IG Post 2 #LeeM_essayrevision</b></li> <li>• <b>IG Post 3 #LeeM_talkingwriting</b></li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• <b>IG Post 4 #LeeM_mypoem</b></li> <li>• <b>IG Post 5 #LeeM_litmemoir</b></li> </ul> </td> </tr> </table> </li> </ul>		<ul style="list-style-type: none"> <li>• <b>Blog Post 1</b></li> <li>• <b>Blog Post 2</b> - extra credit</li> <li>• <b>Blog Post 3</b></li> <li>• <b>Blog Post 4</b></li> <li>• <b>Blog Post 5</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Blog Post 6</b></li> <li>• <b>Blog Post 7</b></li> <li>• <b>Blog Post 8</b></li> <li>• <b>Blog Post 9</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>IG Post 1 #LeeM_sh</b></li> <li>• <b>IG Post 2 #LeeM_essayrevision</b></li> <li>• <b>IG Post 3 #LeeM_talkingwriting</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>IG Post 4 #LeeM_mypoem</b></li> <li>• <b>IG Post 5 #LeeM_litmemoir</b></li> </ul>
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Fig. 1. The assignment directions given to students and posted on Ms. Lee's example portfolio for students to use.

Students completed eight required blog posts and one optional post (see Appendix 1). Ms. Lee did not initially provide any length requirement for the posts, though she would often encourage students to "keep writing" during class time. However, the last three prompts included either a length or time requirement ("at least a paragraph" or "Write for at least 10 min"). Students could also include images or other elements in their blogs, though these were not required.

The final segment of the unit entailed posting reflective pictures or videos to Instagram in response to teacher-created prompts, e.g.:

"Post about your progress/experience revising an old essay. You can be literal (a shot of your actual essay) or figurative (something more abstract) in your choice of image. Include a caption that explains what you're thinking/feeling. Don't forget to use #LeeM3FirstnameLastinitial and use #LeeM3EssayRevision for this post".

Ms. Lee required students to post a total of five times to Instagram (some posted more) for a total of 128 posts for the class (see Appendix 2). All students shared one account for the class to avoid any privacy issues; to self-identify, students hashtagged each post with their names. They also wrote another hashtag that indicated the prompt to which they were replying. Students generally posted to Instagram during class, though they could also respond to the prompts out of class.

#### 4. Methods

To understand the implications of using digital media as writing platforms in an otherwise traditional class, I examined what students were able to do with each of the platforms in terms of meaning making and literacy practices and their resulting implications. For example, many students discussed that they were able to *write informally to think through ideas on their blogs* (the use) which allowed them to *reflect on their connections to text* (implications) that may not have been possible through other forms of formal writing typically seen in this class.

Though a full ethnography was beyond the scope of this study, because classrooms are complex contexts that require both breadth and depth to analyze, I attempted to saturate myself in as much data for this classroom as possible in the hopes of better understanding the participants therein. Furthermore, my multiliteracies theoretical framework dictated that I understand the students' literacies practices from various perspectives to best grasp how students were engaging each of those practices. Thus, I drew from multiple data sources for my analysis, including pre- and post-study surveys with Likert-type and open-ended questions, students' Weebly webpages, blog and Instagram posts, in-situ interviews with students, semi-structured interviews with four focal students (Marta, Daniel, Carla, and Julio) as well as Ms. Lee, and video-recorded observational data and field notes during my 12 classroom observations (two before the portfolio unit and ten during).<sup>1</sup>

I chose the focal students for a range of those who self-identified as liking/not liking writing on the pre-study survey, an equal self-identified gender mix, variations in observed temperament, and variations in self-identified ethnic background that represented the makeup of the predominantly Latinx school. The inclusion of focal students' interviews allowed me to better understand their unique perspectives on how they used each of the platforms for writing, and Ms. Lee's input gave me further insight into how she perceived both what the students did with each of the platforms and the pedagogical implications for the classroom for each of the platforms.

##### 4.1. Data analysis

My analysis centered around how students used each of the three platforms, how they capitalized on the features of each, and the larger implications for these uses. I carefully examined every student-created page on each platform, taking analytic notes about my observations of the pages as a whole, which I then further analyzed through descriptive matrices (e.g., Bazerman, 2006) to examine each element, using content analysis, looking for specific descriptors about them (e.g., tone, order, modes, consistency with other platforms, formality, layout, conventions). I also used a constant comparative approach (Corbin & Strauss, 2008; Gleason, 2018) to compare my findings on each platform to understand how students were designing and creating within and across platforms and their literacy practices therein.

Because each platform had different affordances and were used differently in this classroom context, each required unique analyses. For example, for the Instagram posts which were visual modes-forward, I created categories of the types of posts (i.e., the focus of pictures or videos, see Appendix 3). These resulted in several categories, which allowed me to gain a greater understanding of how the students used Instagram and to what effect. I also examined the captions of the posts to understand how students combined textual and visual modes (Jewitt, 2005). For more text-forward platforms like blogs and Weeblys, the codes within the descriptive matrices centered around Kress and van Leeuwen's (1996) metafunctions pertaining to the textual modal interplay (e.g., demand in formality, layout) as well as the codes within the descriptive matrices. In analyzing individual platforms in the most apt way (i.e., focusing on the predominant elements of each), I was able to better understand on how

<sup>1</sup> Post-study survey responses were anonymous to allow for maximum honesty.



Table 3  
Methods Abbreviated.

	Platforms	Focal Student Interviews	Ms. Lee Interview	Surveys
First Round of Analysis	Content Analysis with descriptive matrices (Bazerman, 2006) focusing on metafunctions (Kress & van Leeuwen, 1996)	Transcribed each according to talk turns and stanzas (Gee, 2014)	Transcribed according to talk turns and stanzas	Iterative, axial coding for how students self-reported using each platform and implications of that use
Second Round of Analysis	Constant comparative approach to generate theories as I analyzed (Corbin & Strauss, 2008; Gleason, 2018)	Iterative, axial and thematic coding (Saldaña, 2015) for how students discussed using each platform and implications of that use (Rambe, 2012)	Iterative, thematic coding for how students used each platform and implications of that use; what she learned from their use	Grouping codes into larger categories
Focus of Analysis	My perceptions of patterns of student use and the affordances	What students said specifically about how they used each platform and why	How Ms. Lee viewed the students' use of each platform and resulting pedagogical effects for her as their teacher	Patterns of student use and the affordances

the students used the unique features of each to bring together multiple modes and showcase various literacy practices, specifically those beyond the use of textual modes.

Under a multiliteracies framework, I supplemented this analysis with an examination of the focal-student interviews to better understand students' own descriptions of how they used each platform within this particular context and the implications of that use. I coded the interview transcripts and open-ended survey responses using thematic coding based on the affordances of each platform (Saldaña, 2015). I used InVivo Coding, which reduces researcher projection of my own bias on their words (Charmaz, 2008), highlights the students' voices, and gives insights into their perspectives and culture (Saldaña, 2015), which is befitting with my multiliteracies framework in that it highlights student perceptions and interactions.

I then turned to my interview with Ms. Lee to provide further understanding of how the students used the platforms and the implications for these uses, coding them similarly to the students' interviews to examine how she perceived the students' writing with each of the platforms, what she may have gleaned or gained from this writing, and what she thought the students gained from this writing (Deng & Yuen, 2011). I then further analyzed the instances in which she discussed what she or the students gained in terms of how she perceived how it affected the students' literacy practices. For an abbreviated list of data sources and their analyses, see Table 3.

#### 4.2. Researcher positionality

Because this is a multiliteracies-framed study wherein the context is of the utmost importance, it is necessary to position myself within the study to address my own bias. Though I make claims about the affordances of the platforms used, these claims are based in my interpretations of how I perceived their representations. The claims are informed and shaped by my researcher gaze as I projected my own bias and experiences on to the data (Anderson et al., 2016).

Moreover, I am a cisgender, white woman working with an Asian-American teacher in a predominantly Hispanic school, neighborhood, and region of the U.S., which likely affected my interpretations of the data as students represented their literary journeys in their portfolios.

##### 4.2.1. Findings

In this section, I discuss the most prominent ways students used each of the three platforms for writing. In brief, I found that students used Instagram to write multimodally, which opened opportunities to express ideas in non-traditional ways that are often not seen or valued in classrooms, especially prior to this unit in Ms. Lee's class. For their Weeblys, students publicly showcased their writing, which opened spaces to publish to a larger audience. Lastly, students used their blogs to communicate informally, which offered the implication of reflecting, specifically on their connections to the texts. Naturally, some of the uses and affordances were overlapping; however, I discuss

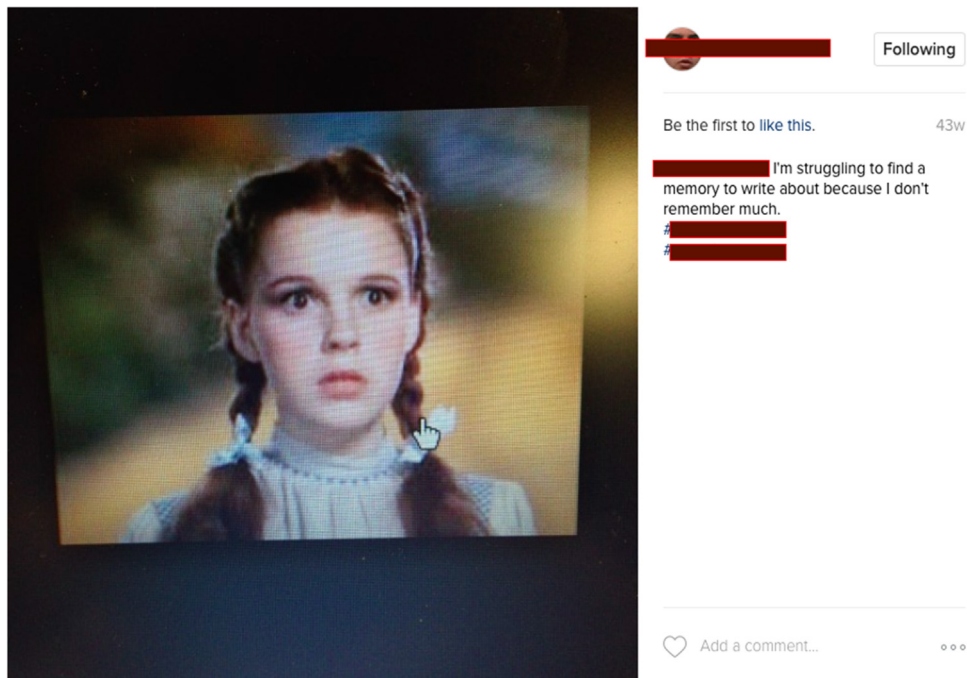


Fig. 2. Instagram post featuring Dorothy looking confused.

them individually here, as the students and teacher separated their discussions of the affordances of each platform often.

#### 4.3. Instagram

In this section, I discuss students' Instagram posts and how multimodal design offered students an opportunity for meaning making beyond the linguistic modes typically used in classrooms (Domingo, 2012; Shanahan, 2013). Because of the visual-forward nature of Instagram, most students attended to visual modes in their posts, despite the typical text-based focus of the class. While there were multimodal elements of design in both their Weebly webpages and their blogs, students did not attend to the design of multimodal resources as keenly and overtly as they did with Instagram (likely because of Instagram's inherent focus on the interplay of modes as a platform).

#### 4.4. Designing multimodally to make meaning

Students used Instagram to design sophisticated posts where humor appeared to be a prominent feature. The most common use of humor was using memes, as 15 of the 128 posts were of memes (analytically categorized as "illustrative"). A meme is "an idea, behavior, style, or usage that spreads from one person to another in a culture", and now more commonly refers to "an amusing or interesting picture, video, etc., that is spread widely through the Internet" (Merriam-Webster.com, 2016). Memes are commonly seen on and created for Instagram as well as other social media platforms.

This meme humor appeared to be unique to the Instagram platform, as students did not include known memes on their Weebly pages or blogs. Memes offered students opportunities to index their ideas within a larger cultural joke that served to draw some of the strongest connections between the posts and the captions (Gleason, 2016). See Figs. 2-5 for examples of students' multimodal memes. According to Boa Sorte (2019), "memes may be an empowering way of promoting multiliteracies in the classroom... [as] the texts broadcasted in mainstream media and pop culture can be remixed into various forms of representation, especially the ones stereotyped by issues of race, age, gender, and social class" (p.53).





Fig. 3. Instagram post featuring Nicholas Cage.

Each of these memes illustrated how the students felt about their literacy memoirs at the time in a humorous way that situated their ideas within the larger context of meme culture. In Fig. 3, the student referenced the content of the picture in his caption through his pun, his reflection about his memoir, and his peripheral comment to the teacher about his grades. Without the interplay of the picture and the caption, the joke would have rested solely on the picture, and the other meanings (i.e., the pun, the comments) would have been lost. In doing so, Brian's post conveys how the students used Instagram: as a visual expression of ideas in response to a prompt (a hyperbolic representation of how he was feeling about his assignment) where the visual and textual modes interacted to allow for more expressive meaning making.

Another post was of a smiling, bright-eyed SpongeBob with a rainbow between his hands and text that read "DISSAPOINTMENT" (see Fig. 5). Silvia captioned the picture, "I thought my essay was good, but...". Here, Silvia used the text of the meme to finish her sentence in an interplay between the visual design of her post and the text-based caption. Her caption and image interact, creating a more complete response of how she viewed her revisions while also including humor.

When designing multimodally, the inclusion of multiple modes means that the semiotic resources of modes are attended to rather than seen as decorative (Jewitt, 2005). These example posts express ideas through the hyperbolic humor in the visual pictures, in the text-based captions, and in the interplay between them where all modes are attended to, and no modes are simply decorative.

These examples serve as representations of the many others where students used Instagram to express their ideas multimodally in ways that perhaps may have been unavailable in traditional print-based text or through singular modes (Bezemer & Kress, 2014; Jewitt, 2005; Kress, 2003), which echo the findings of colleagues (Boa Sorte, 2019; Greenhow & Robelia, 2009; Smith, 2016). Because Instagram posts are, by nature, either pictures or videos with/without a caption, students' Instagram posts were fundamentally image-forward. As a result, students designed their posts using multiple modes through the combination of the visual image/video and the text-based caption required for this class. Though some students primarily relied on one mode or the other for meaning making (e.g., pictures that did not relay much information in combination with reflective captions or visa-versa, see Table 4), many took up the modal resources and designed multimodal posts that served to express their ideas in ways that may not have been possible through a singular use of modes (Kress, 2003).

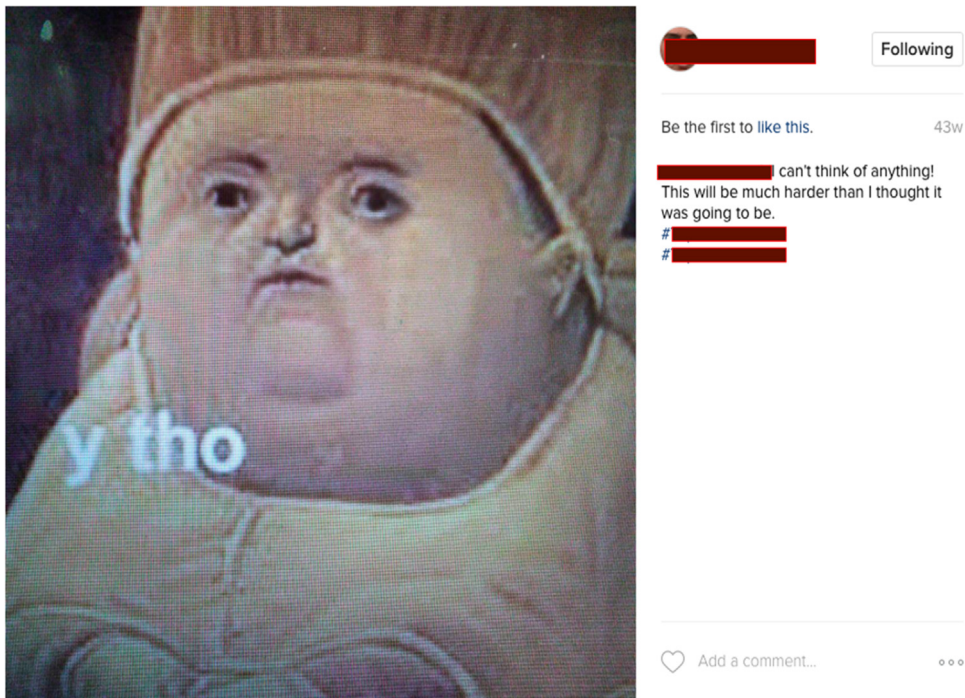
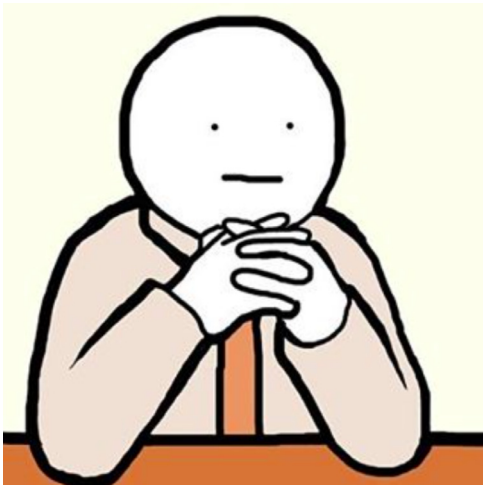


















Fig. 4. Instagram post featuring Fernando Botero oil painting.



Fig. 5. Instagram post featuring SpongeBob Square Pants.

Table 4  
Attending to the Interplay of Modes.

	Multimodal	Less Multimodal
Photo		
Caption	<p>  Following</p> <p>Be the first to <a href="#">like this</a>. 48w</p> <p> When you spend the weekend working on your essay to find out it wasn't due on Monday</p> <p>#</p> <p> Sorry, ! More time now to work on your blog and About page and other things...? #</p>	<p>  Following</p> <p> likes this 43w</p> <p></p> <p># I remember talking to  about my writing. He was telling me how I need to be more open with it and not so straightforward and blunt bc it's boring that way.</p> <p></p> <p>#</p>
Reason/ Evidence	Both caption and picture give information on their own, but together, they create a larger picture of how this student feels about his memoir.	While the caption provides information responding to the prompt, the picture does not obviously relate or enhance.

Another example of multimodal designs on Instagram is images in the caption, a traditionally text-based area for communication. Nine posts (and one comment on a post) included emojis, or small pictures used in text to express an idea, humor, or an emotion, as part of their captions. Emojis can be used in place of, or to further illustrate, written ideas within text. In this case, all nine emojis were used as the latter. For example, on a stock photo of revisions on an essay, Zach wrote, “It’s been a really stressful process 🤔, I’m glad we have more time

to dig into the revision process 📝”. Here, he used emojis both to express his emotions and illustrate his ideas.

The first emoji conveys anger as steam comes out of the nostrils of the character. The second is less informative about Zach’s feelings but echoes his posted picture of a pen on paper. In this case, Zach used the emojis as further expression of the text, which, in combination with the image in the post, allowed Zach to express ideas in several ways that would not be as easily feasible through traditional text-based writing that was common to this classroom.

Perhaps because of the ease of meaning making that multimodal design offered students, several expressed in the final course survey that they enjoyed using images to represent their ideas (e.g., “I really liked Instagram

because I enjoyed using pictures to show my thoughts” and “being able to express myself visually [was the best aspect of this project]”). In focusing on the meaning-making potentials within the images and videos on Instagram and how these potentials could be designed with corresponding captions, students attended to the ways in which the modes interacted (Bazalgette & Buckingham, 2013), rather than simply using image as something supplemental to the text.

Furthermore, in our follow-up interview, Ms. Lee also expressed her satisfaction with students’ interplay of modes for meaning making. She said, “I loved that they got to use pictures and words together in a way that was really compact and concise- and... I think that encourages thoughtfulness in that way.” By nature of the socially constructed norms (Black, 2009; Buck, 2012) of Instagram (i.e., generally not incorporating long captions), the students designed posts to create meaning through the interplay of the visual and textual modes of the posts rather than focusing solely on textual modes like they did with most other assignments in this class.

#### 4.5. Weebly

On their Weeblys, students showcased their writing to share their work with an audience beyond that of just the class, or what Luzón (2013) describes as both peers and interested public. Showcasing their work allowed Ms. Lee to see what writings (genres and subjects) were important to the students, as they self-selected the pieces to represent a range of their writings for an audience within and beyond the classroom. While Instagram and their blogs also offered students outlets to reach a larger audience through their work, because students selected a variety of writing pieces for their Weebly webpages, it was most prevalent within their Weeblys.

#### 4.6. Showcasing writing to an audience

Ms. Lee reiterated many times that the portfolios were meant to be used within the class *and* outside of the class for personal and professional use (e.g., as college writing portfolios, to share with friends/family). The reiteration of this idea likely influenced how the students perceived their audience, which may have influenced the ways in which students viewed and created their portfolios based on for whom they were ultimately designing and for what purposes, or what Ramírez (2011) calls “epformance” in digital portfolios.

More than simply displaying their writing for the public to see, many students expressed that they felt able to choose to whom they would showcase their writing. For example, two focal students, Daniel and Marta, said in interviews that they used Weebly to display information and showcase it to people on the public platform at their discretion. Unlike Instagram where newly posted content is automatically displayed to a user’s followers, on Weebly, the content becomes semi-public, meaning that it is available on the internet, but one will likely not find it unless searching for it or aware of its existence, which allowed students to publish more private content to what they viewed as a more tailored audience. In this case, students expressed that they could remind friends to check their websites, show them in person, or send others a link to their page, giving them a sense of autonomy over their selected audience. Focal-student Daniel said that this made both Weebly and his blog more “personal” and made him more open to both as opposed to Instagram where “everyone had access to seeing” posts. Thus, many students were acutely aware of the potential audience for their writings on their Weebly websites, and selected pieces accordingly (Nelson et al., 2008; Ramírez, 2011).

Specifically for the Personal and Creative Writing section, Ms. Lee encouraged students to select a range of pieces from any time in their lives and from any class. The pieces that students chose were telling of their interests and reflected what was important to them. For example, focal-student Marta, a self-proclaimed lover of writing, chose three pieces, which she described in the titles that she used:

- “A Poem called: Notice Things”: a four-page, free-verse poem that addressed feeling like she was drowning while mixing Spanish, English, literary references, and mythical references
- “TRUTH - A short story (so far),”: a continuation of a short story that Marta started a young child
- “Auto Ethnography”: a two-year old essay in which she vividly described her first piano lesson



Marta's selections were relatively representative of the range that most students chose for their Personal and Creative Writing section (e.g., poems, creative essays, pieces from inside and outside of the class). Being able to showcase these writings was important to Marta, as she expressed in her final interview where she said that these pieces "represented" that "there are different forms of me being myself and different ways that I changed." She referred to how she was representing herself online often, showing her recognition of the larger audience. Though a complex topic, Marta's discussion of representation reflects her writer identity or how she wanted to be perceived. As [Lammers and Marsh \(2018\)](#) note, students' identities and self-representations are "highly fluid, multiple, and transformed in response to each new purpose and audience" (p. 90). This new purpose and audience provided Marta and other students outlets to reflect their chosen representation in this digital context.

Marta also included a link in the form of a button under the embedded short story, TRUTH, reading "CLICK HERE FOR MORE ABOUT TRUTH." The button led to her Google Drive where, at the time of this publication, she still currently houses the story. By including a link to see the future versions of the story, Marta acknowledged her potential audience and their interest in the way that her story might progress beyond what she had embedded in her Weebly, a key feature of digital portfolios and eperformance ([Ramírez, 2011](#)). While she was the only student to include a button like this, other students included links to their outside works, such as Tumblr. By including external links with their showcased writing to other outside writings, Marta and others highlighted the many sides of their writing and selves for their audience.

Other students shared similar sentiments about the ability to showcase their writing. For example, on an open-ended survey response, one student wrote, "I was able to show people my past writings from this year and it showed growth." Because this student looked back over their writings and displayed those that they were most proud of, the student could then show other people a curated expression of their growth as a writer. Similarly, another student on an open-ended survey response wrote, "I could say that using Weebly allowed me to show who I was as a writer and to convey my feelings." The repetition of the word "show" (as well as similar words such as display) was common in both open-ended survey responses as well as focal student interviews. Because students were creating a public portfolio of their work, they could choose what they wanted to showcase for others to see and to design a collection that expanded beyond the context of the classroom.

Albeit not for every student, Ms. Lee felt that what students chose to showcase of their work allowed her to get a better sense of who the students were as writers. In her follow-up interview, Ms. Lee said:

...some of them had chosen things that we had done in class together, some of them had chosen things that they had written for scholarships or for other classes, and so it was cool to see what was interesting to kids and what stuck to them, which pieces they were proud of out of all of the things we had done.

Ms. Lee expressed that, through the students' showcased work, she could see where they "felt successful in their writing" based on what pieces they included as part of their portfolio. She went on to give specific examples of students, including Brittany, who chose to include an essay that she had written for a leadership program at the school. Ms. Lee said, "And that was really telling me that like this is really important to her, and this is where she really feels like she's expressing who she is."

Though Ms. Lee taught these students for two years, by expanding the audience, she was able to glean more understanding of how they presented themselves as writers in different spaces. Through their selections of showcased works, students provided their audience with a curated expression of what they wanted to highlight about their writing and themselves as writers ([Lammers & Marsh, 2018](#); [Ramírez, 2011](#)).

#### 4.7. Blogs

In this section, I address how the informality of blogs allowed students to reflect on their connections to the text compared to the formal literature analyses typically written in this class. Much like Instagram's social constructs favor the visual, blogs tend to privilege informal writing (i.e., less emphasis on citations, prescriptive grammar, and other school-like elements) and typically include personal reflections ([Rambe, 2012](#)). Because of the lack of emphasis on less school-like elements (and more out-of-school literacy practices like reflective, personal, and often non-linear writing), they reflect some of the essential tenets of multiliteracies framework.

#### 4.8. Communicating informally to reflect on connections to the text

Most blog posts were relatively informal in style, tone, and content, as blogs tend to be (Liew, 2010; Manca & Ranieri, 2013; Rambe, 2012; Stornaiuolo et al., 2013). While typical academic assignments require editing and revising, blogs may present a different platform for writing where students can be less formal (O'Byrne & Murrell, 2014; Rambe, 2012). Because students were not focused on the typical elements required of this course (e.g., citing sources, prescriptive grammar, basing ideas within the literature) students could express their ideas more fluidly and openly.

Ms. Lee understand the social conventions of blogs and created prompts to promote reflection and connections to the text to signal to students that this was a space to do so. Thus, even though students knew that Ms. Lee was going to read (and grade) their blog posts, most students were still very informal and candid in their writings. While this informality of communication seemed to be typical in off-handed discursive interactions in this classroom (seen through my observations in the class as well as my interviews with Ms. Lee about her interactions with students), it was not commonly seen in students' writing and classroom activities, which were much more formal and based on citing texts for ideas. Thus, the students' informal communication through their blogs was unique to the context of this portfolio unit.

Students were particularly informal through their word choices and conventions. For example, Michael, whose Weebly and blogs (and classroom responses) were filled with tongue-in-cheek jokes and comments, consistently mixed informal and academic insights. In response to Blog Post 3 (as he titled it "THE GREAT REREADING-RE-read POST DREI"), he wrote, "Right now I am getting into the great Gatsby and things are getting spiiiiiiicy, with Tom having Nick meet his mistress."<sup>2</sup> "Spiiiiiiicy" here conveys both intonation as well as his personal reaction to the events in the book. However, in the next portion of his post Michael addresses the prompt in a more academic and reflective way, while still keeping his informal tone:

Scenes that involve setting up the surrounding environment in stories has always been an issue for me. I guess never really pay attention enough and sometimes I even skip straight to the dialog. Thankfully the way that Fitzgerald writes is more than interesting enough to keep my attention.

His honesty coupled with his analysis allowed Michael to respond to the prompt in a reflective, informal way that conveyed aspects of his outwardly sarcastic persona while still meeting the requirements of the prompt. His reflection circles the ways in which he relates (or doesn't) to texts through authors' styles of writing. Because Michael could write informally using the blogging platform rather than engage the prompt in a more formal way (e.g., essay), he could then reflect in an honest, candid way about his connections to the text (Deng & Yuen, 2011; Manca & Ranieri, 2013; Xie et al., 2008). Based on the prompts as well as the social conventions of blogs, Michael and peers could use the blogs as a place to think through their ideas rather than present a finished product, for which many multiliteracies and multimodality scholars advocate (VanKooten & Berkley, 2016).

Despite the option for informality that some students embraced in their blogs, others opted to write more academically, likely based on the pre-established context of the classroom. They used school-like language and responded to the prompts by including the language directly from the prompt. For example, Katie began a post by writing, "I have begun re-reading The Great Gatsby, by F. Scott Fitzgerald. I'm currently on the second chapter of the book." Here, Katie addresses the prompt directly (what she is reading and how far along she is in the book) without including any extra reflection or informal communication. In doing so, Katie's blog post feels like an academic piece of writing rather than a personal reflection like Michael's. By not using the blogging platform for informal communication, Katie also did not reflect on her connections to the text in the rest of her response, discussing only the book and not herself. Writing about the text without inclusion of oneself was typical of the literature analyses and formal writing previously conducted in the class before the portfolio unit, and Katie was likely still orienting to that type of writing.

Overall, however, students used their blogs as informal, less-academic platforms through which they could express ideas and personally reflect on their connections to the text. An example of this personal reflection and honesty can be seen in focal-student Julio, a quiet student who often expressed his strong dislike for writing. In his

<sup>2</sup> Of the eight required blog posts, six were concerning a project called "The Great Re-Read" where students revisited a book that they had previously read and wanted to understand better, read with a new perspective, etc.



response to Blog Post 4, Julio thoughtfully and candidly reflected on his relation to Melinda, the main character in his book, *Speak*, who tries to hide a serious trauma throughout the book and only reveals what happened to her to readers towards the end. Julio wrote that he too had felt like a victim before, alluding to his own trauma that he wants to hide: “I feel the same way with some things that have recently happened to me. I feel like I don’t want anyone to know because people might treat me differently.”<sup>3</sup> Julio’s response gave more insight into his feelings and emotions that I had seen from him in my several weeks of observations, interactions, and interviews.

During in-situ interviews, Julio was usually disinterested and answered questions with one/two-word answers. His other writings showcased on his Weebly were formal, prescriptive, and short. Conversely, the informality of the blogging platform allowed Julio to write openly at length and personally reflect on his connections to the text and how these connections changed as his experiences did over time (Deng & Yuen, 2011; Xie et al., 2008;). This open and reflective new platform allowed Julio to present himself differently (Lammers & Marsh, 2018) than he did on other platforms and through other kinds of writing.

Though not quite as personal, other students also expressed candid reflections about their experiences while re-reading their books in their posts, using process writing and shirking conventions. For example, Christina wrote about her book, *1984*:

I think that I don’t remember much of it because i didn’t care or was interested in it. It was so slow when I was a freshman. I preferred book thats had some romance and action. AKA. Twilight series and Hush. but now I feel like I found a new appreciation for these conspiracy sort stories and different worlds that people have created. I even took the time to figure out how to take notes on the pdf ’cause I really want to understand it.

Christina’s informal honesty concerning her reflection about originally disliking *1984* showed that she felt comfortable expressing her ideas about the book (“i didn’t care or was interested in it”) and her preferences for reading materials as a younger student (“I preferred book thats had some romance and action”) while shirking the prescriptive conventions valued in this class. Typically, this kind of honesty about not caring about a project is not likely to be found in academic writing (especially in this class), but the informality of a blog blurred the lines for expressing such honesty and for doing so in her style of writing. Because she could personally reflect on the changes that she experienced as a reader, Christina conveyed her newfound enthusiasm for *1984* in a convincing and candid way that also showed her reflection on her connections to the text.

Furthermore, in response to an open-ended question on the final survey, one student wrote, “I feel like when it comes to my blogs I am able to express who I am and what things mean to me. Also I am able to show what things represent to me and how I view things in my perspective.” This feeling of personal reflection differs from what can be done through the more traditional academic assignments such as essays and writing prompts to which these students were accustomed, as it allowed students to reflect on their own experiences and write about them honestly and informally, following the conventions of blogs. Though formal, linguistic-based writing has its place within education and is typically valued over informal writing (Nelson et al., 2008; Shanahan, 2013), the informality of the blogs gave students more space to think through ideas rather than present formalized, concrete ones, which in turn allowed for an activity rather than a set of mastered skills (Breuch, 2002) for which multiliteracies scholars often argue (VanKooten & Berkley, 2016).

In her follow-up interview, Ms. Lee described the blogs as “necessarily personal” and noted that it was “interesting” to see the students be “really honest” in their blog responses. Ms. Lee discussed a particular student, Rachel, who she described as “*really quiet* in class” who did not talk “unless you make her.” Because of Rachel’s personal reflection in her blogs, Ms. Lee felt that she got to know Rachel:

...getting to know her- because I never hear her voice, so getting to hear her voice through her writing was a really interesting experience. And I kind of felt like “gosh I had been missing out on all of this for two years.”

Rachel’s use of the blogs as an informal platform to personally reflect on connections to the text allowed Ms. Lee to see a different side of Rachel that she was representing when writing for a new purpose (Lammers & Marsh, 2018).

<sup>3</sup> Though the blogs elicited a personal reaction, Ms. Lee appropriately followed up on Julio’s wellbeing (mandatory reporting) based on the sensitive nature of his reflection.

## 5. Discussion

In today's post-pandemic world where digital tools are more salient than ever in education, it is important to understand the ways in which one can leverage the affordances of those tools. The portfolio unit examined here offered opportunities for Ms. Lee and her students to break down the borders between the students' in- and out-of-school literacy practices, which resulted in a rich unit wherein students could express ideas informally and through multiple modes for a larger, authentic audience. Ms. Lee and her students expressed sincere enthusiasm and feelings of transformation in how they were able to express ideas and understand each other as a result of this bridging of literacy practices.

By including Instagram, a visual-forward platform, Ms. Lee opened spaces for other forms of expressive meaning making and supported students' literacy practices beyond traditional linguistic modes. While multimodal authoring entails attending to the complex ways in which modes work together to form new meaning (Jewitt, 2005, 2008; Kress & van Leeuwen, 1996), teachers and students must attend to the ways in which modes are working together to create meaning, rather than simply looking at their presence, as is often done in multimodal projects (Shanahan, 2013). This attunement and discussion may be a challenge for teachers, as multimodal texts do not carry the same assumptions that linguistically-based texts do (Jewitt, 2005; Shanahan, 2013). However, by attending to the interplay of modes, teachers and students can convey information in new ways, such as Brian's post that expertly conveyed humor and his feelings while reflecting on the prompt.

Additionally, students also had a space in which they could design and present their writing to a greater audience beyond the walls of the classroom, a key tenet of multiliteracies and an important aspect of this portfolio unit and today's globalized world. Many argue that digital portfolios present a space for students to curate and interact with an audience through their selection of included works, sharing publicly and representing their body of work like an artist (Ramírez, 2011). The students in the present study curated their own portfolios through their selection of works to display a range of pieces that served to reach an audience outside of the classroom. In the case of their Weeblys, this audience was one that could even be semi self-selected, providing autonomy over their sharing. Because of the publishing capabilities, digital media can allow for an expanded, potentially interactive audience (Hughes & Morrison, 2014; Magrino & Sorrell, 2014). Thus, students' curated work can reach a wider audience (perceived or actualized) than just the teacher or even other students through social media, a cardinal principle of multiliteracies.

Furthermore, these students used blogs to personally reflect on their connections to the text. Blogs are often not evaluated or evaluated holistically based on their completion, which can allow users to express ideas about their experiences and personal connections more freely (Deng & Yuen, 2011). This reflection can lead students to greater connections to activities and a better understanding of ideas (Deng & Yuen, 2011) as well as a better connection between students and teacher, as Ms. Lee expressed. However, because other scholars have found that students' reflections may be superficial (e.g., Bennett, & Maton, 2010; Krause, 2004), many argue that strong, scaffolded prompts from teachers are needed to help guide students in their writing (e.g., Hungerford-Kresser et al., 2012; Zawilinski, 2009). Ms. Lee did just that, and thus, she provided the students' a context in which they could express personal and emotional reflections in candid ways that allowed for greater connections to the text and to the reader.

While Ms. Lee capitalized on the uses of each of the platforms and their implications for her class, she still encountered struggles as she felt ill-prepared for the open-endedness of digital media and its potential authoring paths, as many likely felt during the transition to online education in 2020. Thus, educators may need more understanding of what it means to design using digital media to help prepare students for multimodal composition. Many teachers are taught how to incorporate digital technologies into the classroom in ways that focus on the tools rather than the practices (Miller, 2008; Shanahan, 2013). This type of education perpetuates "the view that writing is unaffected by the material tools and available semiotic resources used for writing production with digital technologies" (Shanahan, 2013, p. 197). The focus of the digital technologies should not be simply on the platform, but on the (literacy) practices possible with that tool (Bazalgette & Buckingham, 2013), as was the case in this study. Without the buy-in from teachers and students about the importance of the potential practices with a platform, its use becomes stale and may not be the most apt medium for writing. Instead, the focus should be on (1) *why* the platform is used, (2) *how* the platform is used, and only then (3) *what* is created with the platform.

As many multiliteracies scholars attempt to and teachers are required to shift educational literacy practices from traditional, formal, print-based texts to more inclusive, open-ended, multimodal forms of communication, (Bialostok, 2014; Mills, 2009), cases like this study can add to the understanding of how digital media can be incorporated into the classroom to enhance literacy practices in ways that traditional forms of writing (like those common in this classroom) may not.

### 5.1. Classroom application

For teachers trying to navigate the increasingly digital world of education post-COVID, including multimodal assignments may mean highly scaffolded discussions about what an interplay of modes looks like (i.e., when the sum is more than the parts) as well as a metalanguage to discuss this interplay (New London Group 1996). In doing so, teachers and students can discuss multimodality, a potentially foreign element in the classroom, the way they would discuss other seemingly subjective topics like poetry or art, which can allow for complex writing wherein students are not bound to meaning making through singular modes but where discussion, expectations, and assessment are clear. Example assignments may be creating infographics on Canva about history topics or alternative endings to a story in graphic novels on Pixton.

Furthermore, because of the shift to online education in 2020, students and teachers began working in digital platforms that already had potentials of a globalized audience (e.g., Google Classroom). By opening spaces for audiences beyond teacher and peers (e.g., publishing/writing online, particularly in more interactive spaces), teachers can engage students who may not otherwise value an assignment. Assignments may include using Twitter to interact with an historian/scientist, publishing infographics to Vizua.ly for comments, or creating Facebook pages as book characters.

Finally, focusing on the writing process over the final product in digital contexts can open spaces for students to be reflective and candid in their writing without focusing on grammar, citations, and formal tones. Students can use digital tools like blogs to think through ideas in potentially interactive and, ultimately, reflective ways. Potential assignments could be video blogging on TikTok, interactive journaling with teachers and peers on Penzu, or journaling about books on GoodReads.

## 6. Limitations and future research

Because this study focused on one section of one classroom to gain a rich, deep understanding of the experiences of the participants, there are obvious limitations to the generalizability of the results. Ms. Lee and her students' experiences will not be the same as all students working with digital platforms, as numerous factors affect the affordances presented here. However, subsequent studies that to explore digital media's use in the classroom may continue to shed light on how teachers can authentically bring in digital media and to what pedagogical ends. In exploring the experiences of these students and teacher, others may be encouraged to explore multimodal authoring paths in their own classrooms to open spaces for alternative authoring.

Additionally, while other studies (e.g., Anderson et al., 2017; Domingo et al., 2014; Edwards-Groves, 2011) have explored students' multimodal academic writing with similar findings, the majority of the writing explored here was relatively informal (as characterized by Ms. Lee and the students compared to their typical classroom writing). The affordances of each of these platforms may have shifted slightly if students were using them for more formal, academic writing that still remained multimodal.

Furthermore, even though Ms. Lee designed the portfolio unit to work across platforms, the depth of this analysis only allowed me to explore the affordances of the platforms individually. Therefore, much like exploring how modes work together to create more than the sum of their parts, other researchers may wish to explore how students can work across multiple platforms to design complex creations that transcend the use of the individual platforms. Through such investigation, we may glean greater understanding of even more engaging and inclusive authoring paths for students.

## Appendix 1. Weebly Blog Post Prompts with optional Blog post #2

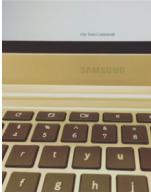
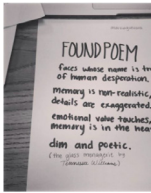




POST #	PROMPT/DIRECTIONS
1	Write about your reading choice for The Great <i>Re-Read</i> project. What are you re-reading? Why are you re-reading it? What do you hope to gain from re-reading it?
2 (BONUS)	Embed your Instagram post into a blog post. Add whatever additional related text you'd like.
3	Where are you in your re-reading right now? If you're at least a few pages in, how is the beginning different/similar to how you remembered it? If you haven't started your re-read yet, why/why not? What do you remember from the beginning of the book?
4	Sometimes we are pulled toward one or two characters in the story. We identify with them or feel sympathy for them. With which characters do you identify in the book, and why do you believe you identify with them? Is your understanding of particular characters different this time than the first time you read the book? How? Why do you think this has changed?
5	Consider your work on the Senior Writing Portfolio over the past week. Give yourself a rating from 1 to 5 stars. Explain why you deserve this rating. Describe what you plan to do to keep up with the requirements of the Senior Writing Portfolio in the next few weeks. Discuss any questions, worries, anxieties, or problems you have had with the project so far. How do you plan to address these?
6	Sometimes when we read, certain words or phrases or images stand out. Maybe they are words or phrases that make an impression because of their sound, or maybe the meaning or image they make strikes us. Sometimes we find words or expressions we just do not understand. Perhaps there is something you're noticing on this re-reading that you didn't notice the last time you read it. Share those that you have come across and describe why you listed them. Write at least two paragraphs with clear examples (providing direct quotation and page numbers if applicable).
7	If you could ask any character a question, what would you ask? If you could ask the author a question, what might that be? Explain why you chose these questions. Write at least one paragraph.
8	Choose ONE item from the literacy timeline you created today and tell the story of that experience. What makes this moment memorable? Write for at least 10 min.
9	As you (hopefully) wrap up your re-reading of your book in the next week, reflect on your experience. What have you gained from your re-reading of this book? Are you glad you re-read it? Explain why or why not. Write at least one paragraph.

## Appendix 2. Instagram Post Prompts

DATE	POST #	PROMPT/DIRECTIONS
3/31	1	Take a picture/video of this page [Weebly practice page] and post to Instagram with a reflection of how easy/difficult you felt that this assignment was. Use the hashtags #LeeM3FirstnameLastinitial (You'll use this for EVERY IG post you make.) AND #LeeM3SH (SH for Scavenger Hunt) as well as any other hashtags you feel are appropriate.
4/4	2	Post about your progress/experience revising an old essay. You can be literal (a shot of your actual essay) or figurative (something more abstract) in your choice of image. Include a caption that explains what you're thinking/feeling. Don't forget to use #LeeM3FirstnameLastinitial and use #LeeM3EssayRevision for this post.
4/7	3	Post about someone you talk to about your writing, personal or academic. (You MUST have their permission if you post a photo of their face!) This could be a person you talk through your ideas with, a person who reads your drafts, etc. Explain what makes this person a good source of writing help for you. Use #LeeM3TalkingWriting for this post, and don't forget to use #LeeM3FirstnameLastinitial to identify all your posts.
4/14	4	Post at least one of the poems you wrote or worked on today. A work-in-progress (#WIP) is okay! What is one thing you like about your poem? Use #LeeM3MyPoem for this post, and don't forget to use #LeeM3FirstnameLastinitial to identify all your posts.
5/10	5	Post an image to represent your feelings/experience writing a literacy memoir so far. Include a reflective/explanatory caption with your image. Use #LeeM3LitMemoir for this post, and don't forget to use #LeeM3FirstnameLastinitial to identify all your posts.

## Appendix 3

Categories of Instagram Posts.

Type	Computer	Poems	Students	Illustrative Picture	College Pride	Other
# of Posts	42	34	16	22	3	11
Example						

## Data availability

The data that has been used is confidential.

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