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# Bridging out-of-school digital literacy through multimodal composition for EFL students with developing proficiency

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This action research examined the process of integrating students' out-of-school digital literacy into a second language composition class and the role of social mediation in developing learner agency. It involved EFL students with pre-basic and basic proficiency (pre-A1 to A1-A2 on the CEFR level) in a Saudi Arabian university. Using socially mediated view of literacy and learner agency as a theoretical framework, this study reveals the complex ways in which the students composed multimodal texts while relying on their agency to utilize the digital tools. Data sources include interviews with the students, teacher-researcher reflections, and the students' multimodal texts. The data reveal that through three distinct bridging practices, the students skillfully navigated through different reading sources and digital tools when they composed their multimodal texts (*technological bridging*), thus affording the opportunities for them to express themselves authentically (*identity bridging*) and to engage with the text that they composed meaningfully (*semiotic bridging*). However, there was a trade-off in terms of the teacher's role in facilitating learner agency and linguistic accuracy. Focus on content lowered the bar on acceptable grammar mistakes. This insight corroborates existing literature on the need for a balanced pedagogical focus on content and accuracy in multimodal composition. This study has implications for teachers who wish to reimagine EFL composition by connecting it to students' literacy practices, particularly to those with pre-basic and basic proficiency.

**Keywords:** multimodal composition, multiliteracies, learner agency, identities

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## Introduction

Over the past two decades, there has been a renewed interest in studies of second language (L2) composition on how to bridge students' out-of-school digital literacy (Lai et al., 2015; Reinders & Benson, 2017; Sauro & Zourou, 2019; Thorne & Reinhardt, 2008) into the classrooms (Elola & Ozkos, 2017; Zheng & Warschauer, 2017). Since many of the literacy activities that students do are online, studies have recommended L2 composition teachers and curriculum developers to incorporate aspects of informal learning to keep writing relevant and motivating for students (Godwin-Jones, 2018; Jewitt, 2008).

In response to this call, multimodal composition activities are slowly gaining currency in both ESL and EFL contexts as more and more teachers integrate different semiotic modes – be it audio, visual, spatial, and gestural – into their writing assignments. These compositions take on different forms, ranging from digital storytelling (Lee, 2014), YouTube documentary (Hafner, 2014), webpage composition (Shin & Cimasko, 2008), fansubbing (Sauro, 2017), interactive posters, and text-to-speech listening activities for writing revisions (Dzekoe, 2017).

While these studies suggest how multimodality can be integrated into an L2 composition class, the focus has largely been on students who are at intermediate or advanced proficiency levels, allowing relatively rich texts to be generated in the composition process. Additionally, most of these studies do not foreground the pedagogical constraints of integrating multimodality from the perspective of the teacher who scaffolds the composition process; nor do they highlight the socially mediated role of learner agency for students with lower proficiency. Positioning ourselves as practicing teachers and researchers, we aim to fill this gap by investigating the process of multimodal composition among students with pre-basic and basic proficiency (pre-A1 to A1-A2 on the CEFR level) – or what we refer to as ‘students with developing proficiency’ – and the role of the teacher in affording language learning opportunities for this group of students.

Before we move on to our study, we turn to the theoretical and empirical literature that informs our conceptualization of out-of-school digital literacy, multimodal composition, and learner agency.

## Theoretical framework

### *Social semiotic view of literacy*

The end of 1990s marked an increasing awareness among literacy researchers and educators of the role of other modes of meaning making in everyday life (Cope & Kalantzis, 2015). As digital technologies evolve, people's interaction with texts has moved rapidly from print-dominated content toward multimodal content, through a combination of linguistic, visual, audio, gestural, and spatial modalities (New London Group, 1996). In fact, these ‘post typographic’ texts are now the hallmark of how people convey and interpret meaning/information in the new media (Lankshear & Knobel, 2013). In the social and



cultural studies of literacy that we cite here, this ‘new’ literacy is often called *multiliteracies*.

Outside of school walls, young people (EFL students included) are engaged in digitally-mediated activities involving reading/viewing and writing/composing/designing ‘texts’ all the time (Godwin-Jones, 2018; Lim, 2021). Despite their bite-size posts or skimming and scanning words on their social media, students are now consuming and producing digital texts more than ever (Gee & Hayes, 2011), some even argue even more than any time in history (Potter & McDougall, 2017). This digitally-mediated reading and writing activity is what we define here as out-of-school digital literacy.

From a theoretical standpoint, the term *multiliteracies* does not just denote the multiple representations of meaning in digital texts. More importantly, it demands a paradigm shift in viewing what it means to be literate in this day and age. Moving beyond the strict cognitive view which defines literacy as the ability to decode print-based texts, the social semiotic theory views literacy as a socially situated practice that is bound up with the particular sociocultural contexts, institution, and social relationships (New London Group, 1996). Therefore, the cognitive skills, rhetorical styles, and interpretive strategies involved in any act of reading and writing are largely influenced by the prevailing practices in a particular sociocultural group (Lam, 2000). As we explain in the findings and discussion section of this study, one of the main educational implications for L2 teachers is to bridge all these skills, styles, and strategies that students already possess outside of school and bring them in L2 composition (Lankshear & Knobel, 2013).

### *Socioculturally mediated view of learner agency*

Around the same time when literacy scholars called for a paradigm shift in literacy studies, the field of educational psychology also witnessed a social turn in learning theories, including the conceptualization of learner agency. Since the late 1990s, the theoretical construct of learner agency has shifted from the ‘individual capacity to act’ to the ‘socioculturally mediated capacity to act’ (Ahearn, 2001; Bandura, 2008). In the context of L2 learning specifically, Mercer (2011) and others (see Godwin-Jones, 2019) have highlighted the importance of understanding learners’ agentic behavior as *intrapersonally* mediated (through their physical, cognitive, affective, and motivational capacities) as well as *interpersonally* mediated (through social interaction and scaffolding). From this theoretical perspective, learner participation and action – or the lack thereof – is not merely an inherent personal characteristic but are inextricably linked to how learning environments – including the technological tools, the task, and the classroom interaction – are structured (Mercer, 2012).

The distinction between ‘individual capacity’ and ‘socially-mediated capacity’ is particularly relevant to the student group that we studied because of the deficit discourse that is often associated with students with developing proficiency (Shapiro, 2014). Rather than looking at students with pre-basic and basic proficiency as having ‘low proficiency’ or ‘limited English’ who lack the



resources and skills to write in the second language, the sociocultural view of learner agency shifts the focus to the relational apparatus that can be optimized to further develop their skills – or *afford* – their capacity to act. As van Lier (2000; 2008) and others (Gee & Hayes, 2011; Mercer, 2012) have argued, all the contextual factors represent latent potential or affordances which, if engineered properly, may help students to make personal sense of their learning experience.

## Literature review

### *Bridging out-of-school digital literacy into the classroom*

As we alluded to earlier, one of the affordances that have been studied in the context of L2 composition is students' out-of-school digital literacy skills. By allowing students to participate in the creative process of composing English texts using the digital skills that they already have, teachers can 'build bridges' to ease students into the parallel world of school-based composition (Zheng & Warschauer, 2017). In fact, studies have shown that incorporating some elements of informal digital composing skills that the students bring with them into the classroom can be more motivating and effective (Cole and Vanderplank, 2016). Using the 'bridging activities' framework espoused by Thorne and Reinhart (2008), Elola and Oskoz found that the experience and practice that L2 learners gain informally from their everyday life – with the affordance of schooling – help the meaning making process associated with a particular social and cultural practice (i.e., semiotic bridging). Furthermore, such bridging practices also improve their linguistic awareness (i.e., linguistic bridging).

Smith et al.'s study (2017) provides another evidentiary support for the affordance of bridging practices in L2 classrooms. In a middle school bilingual classroom, students were tasked to complete a presentation about the life of a personal hero (i.e., identity bridging) using multimodal representations including a recorded interview and a PowerPoint presentation (i.e., technological bridging). Aligned with Reinhardt and Thorne's (2011) three-stage model of bridging, students in this study first *observed* sample multimodal projects, then *explored* different digital technologies and modes for use in their project, and further *created* their own multimodal product using different tools, modes and languages. For such bridging practice to be effective, Cho (2017) argues that tasks must be authentic and personally motivating, rather than prescribed by teachers. In fact, as documented in a quasi-experimental study by Vandommele and colleagues (2017), students who were given structured opportunities in the classroom to incorporate their out-of-school digital literacy skills into their L2 writing projects improved their writing skills more significantly than those who were in traditional writing classrooms. The authors argue that this is due to more autonomy given to students regarding content (i.e., semiotic bridging) and mode selection (i.e., technological bridging). In the next section, we discuss more linguistic benefits of the bridging practices.

## *Language learning benefits of multimodal composition*

In L2 education, the idea of integrating other semiotic modes into a composition task (i.e., multimodal composition) has been critiqued as sidelining the role of language (Jewitt, 2009). Yet as Dzekoe (2017) aptly points out, “far from sidelining language, multimodality seeks to highlight how language and other modes interact and sustain each other in communication” (p. 74) (see also Yeh, 2018). Therefore, when investigating L2 learning in the digital media, one needs to look at the totality of the relationship between the learners, the technology, and other mediating contexts, and how they afford or constrain the opportunity for the learners to use the language (Kern, 2006).

Several linguistic benefits of multimodal composition have been cited. In a study by Lee (2014), for instance, advanced Spanish students were tasked to create and exchange digital news regarding current events using an interactive multimedia tool called VoiceThread. Over the course of a semester, the social interaction afforded by this exchange of news has allowed the students to provide feedback on each other’s writing and improve their speaking fluency. Similarly, Shin and Cimasko (2008) reported that ESL students in their study were able to convert a traditional argumentative essay into a web-based text, while developing the awareness of the semiotic functions of non-textual elements such as images, hyperlinks, and spatial arrangements in enhancing writing. Other benefits include increased language production (Darrington & Dousay, 2015; Ozkoz & Elola, 2016), exploration of personally-relevant identities (Lemke, 2009), and learner agency (Jiménez-Cañedo et al., 2014). As we discuss in the results of this study, the last three benefits cited here are also relevant to students with developing proficiency.

### *Research questions*

Informed by the theoretical and empirical literature above, we asked the following research questions (RQs):

1. How do teachers bridge out-of-school digital literacy through multimodal composition tasks for students with developing proficiency?
2. What are the constraints of implementing multimodal composition for this group of students, and how does social mediation afford the opportunity to address these constraints?

## **Methods**

### *Research design*

We used action research as our methodology because we intended to provide practical solutions to the unique challenges that L2 students with lower proficiency pose when it comes to multimodal composition. Action research has gained popularity in the field of applied linguistics and language teaching and is now considered as a legitimate research-based inquiry (Edwards & Burns, 2016; Sato & Chen, 2019). As the term entails, the teacher (or practitioner)



is engaged in both the ‘action’ of teaching and the systematic inquiry (i.e., ‘research’) and critical reflection of their teaching (Barrs, 2012; Burns, 2011). By identifying a particular educational problem in a localized context (i.e., the classroom), the teacher-researcher finds solutions to what is not working and brings changes to the immediate environment affecting the stakeholders (i.e., the students) (Creswell, 2012; Sato & Chen, 2019).

Positioning ourselves at the intersection of practitioner and academic communities, not only were we interested in answering the call to incorporate multimodal composition into an English classroom but also to critically reflect on how its affordances could be maximized and constraints could be addressed for our specific group of students. As Adler (1993) and others (Ham & Kane, 2007; Redman & Rodrigues, 2014) note, such critical reflexivity allowed us to step back from being in the midst of our teaching experience and explore that experience more systematically. By doing so, we continued to refine our teaching skills and practices.

According to Nunan (1992), action research consists of a question, data, and interpretive analysis. It is cyclical with the results of the initial research question feeding back into practice and extending the initial inquiry (Kemmis & McTaggart, 1988). It comprises two cyclical phases wherein the teacher continuously plans, acts, observes, and reflects (Barrs, 2012; Kemmis & McTaggart, 1988). Following Villamizar’s and Mejía’s (2019) approach to action research, we also utilized the principles of case study research in our data collection and analysis process. Case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context (Yin, 2009). Case study often involves only a few systematically selected participants (purposive sampling). Thus, rather than relying on theoretical generalizations obtained from large pools of participants, this methodology is based on detailed descriptions of the setting, phenomena and/or individuals, as well as on in-depth analysis of the data, searching for common themes, recurring patterns and significant issues (Stake, 1995). Consistent with our rationale for choosing the action research methodology, our reason for utilizing case-based approach was not to formulate generalizations from a small classroom sample but to theorize from our findings, looking for ways in which the task could enhance the students’ L2 learning, while improving their engagement with English composition.

### *The courses: The two cycles*

The study was conducted in two preparatory EFL courses that we taught in two consecutive semesters (16-week, 8-credit/semester). We considered each semester as an individual action research cycle as defined by Kemmis and McTaggart (1988), wherein we continuously engaged in planning, acting, observing, and reflecting (see Table 1). The two courses were designed for different proficiency levels: (a) pre-basic to basic level (starting at pre-A1 to A1 on CEFR) for first-semester students and (b) basic to pre-intermediate level (starting at A1 to A1-A2 on CEFR) for second-semester students. The courses met for four hours,

five days a week and followed an integrated approach in teaching listening, speaking, reading and writing. The writing components adopted genre (Swales, 1990) and process approaches (Matsuda, 2003; Silva & Leki, 2004) to academic English. In addition, the courses had a small component of business English for students who chose business and management majors. Each course was part of a larger group of 8 to 11 parallel sections which used standardized contents, pacing schedules, and assessment schemes. We co-taught one of the sections in the first semester, and only one of us taught in the second semester.

### *The multimodal composition tasks*

As part of the preparatory year curriculum, students were required to write short paragraphs (between 100 and 150 words) on descriptive, narrative, explanatory, comparative, and process genres. These paragraphs were part of their graded portfolio, and all assessment rubrics were standardized across all sections. Due to this institutional restriction, we could not modify the graded writing assignments and therefore could only design multimodal projects as an add-on practice for the graded writing assignments. In each course we introduced one multimodal composition task before the midterm exam and one before the final exam. Before students began each task, we asked the class to vote on whether they wanted to do the multimodal composition tasks in small groups or as individuals. Table 1 below summarizes the learning objectives, writing prompts, and types for each task.



**Table 1.** Tasks, learning objectives, and writing prompts

Semester	Learning objective	Writing prompt	Task type	
<i>Phase 1 cycle: plan, act, observe, reflect</i>				
Task 1	First	Students can describe companies, departments, and their responsibilities using at least 5 words from the unit vocabulary. <i>(Business English component)</i>	Describe your dream company using the business vocabulary we have learned in class.	Small group
Task 2	First	Students can explain how to use common technology in simple steps using at least 5 words from the unit vocabulary. <i>(Business English component)</i>	Explain how to use a common technology in simple steps using the business vocabulary we have learned in class.	Small group
<i>Phase 2 cycle: plan, act, observe, reflect</i>				
Task 3	Second	Students can describe what companies do and their products using at least 5 words from the unit vocabulary. <i>(Business English component)</i>	Describe your favorite company using the business vocabulary we have learned in class.	Individual
Task 4	Second	Students can write a 150-word process paragraph using correct paragraph structure. <i>(Writing component)</i>	Explain how to create VR glasses in an easy way.	Individual

Similar to the graded writing assignments, the composition process of the multimodal projects followed the process approach to writing (i.e., prewriting – drafting – editing – publishing). In the second week of class, we introduced the students to our study and to the concept of multimodal composition. We showcased some examples of writing projects done in multimodal format (including brochures, websites, online reviews, and videos) to help students understand the tasks. We did not limit the format or final output that students could create in each project.

In the first semester, upon the submission of students' first draft, we gave *content-focused* as well as *language-focused* feedback including common grammar, vocabulary, and punctuation mistakes and addressed the issues as a whole class. After the class feedback, the students revised the written script and incorporated it into their project. The students presented their project at the end of the thematic units. We concluded the presentation sessions with a reflection on how to connect the skills that they had learned when writing the academic paragraphs to their personal and professional (future) lives. Upon further reflection, we modified our feedback strategies in the second semester, to include individual feedback focusing on linguistic accuracy. Discussion on this is explained further in our results.

## Participants

In all, 27 students were enrolled in the first semester, and 15 students were enrolled in the second semester. Because of the departmental restriction, we could not teach the same student cohorts in the first and second semesters. In this sense, the students we sampled were considered as cross-sectional sampling as they did not overlap. We introduced the study to the students in the second week of class and had them sign the consent form to participate in the multimodal composition projects as part of the course non-graded assignments. At the end of the semester, we interviewed four focal students to reflect on their multimodal composition process as well as their out-of-school literacy practices. From each cohort, we purposely sampled two students based on the following criteria: one with low and the other with average proficiency based on the norm of the class.

## Data collection

There were three primary data sources in this study: (a) students' multimodal projects, (b) focal students' interview transcripts, and (c) our reflection session notes after each project submission. In the first semester, out of the 27 students, six students failed to submit the first draft and the final output, seven submitted their work in video format, and 14 in brochure format. In the second semester, only two students failed to submit the first draft and the final output, and the remaining 13 submitted their work all in video format.

As for the interviews, both of us met with the four focal students individually. Each interview lasted for approximately 35–40 minutes. The interview focused on three lines of questions: (a) their first and second language (L1-L2) literacy history as well as their out-of-school digital literacy skills, (b) stimulated recall on how they developed their ideas on the topic and the format of the project, including the process of drafting the written scripts as well as integrating the visual, sound, speech, and spatial components into the project, and (c) their reflection on the project itself, including its relevance to their everyday lives and the feedback that we had given.

Finally, we took individual notes after each multimodal presentation to record our overall impression of students' work as well as what we thought was – or was not – working from the experience. We then shared these individual notes in our reflection sessions, which lasted about 45 minutes individually, to refine our teaching strategies. In the second semester, however, because the first author did not teach the course, the second author shared students' first drafts and final multimodal outputs with the first author to maintain our individual notes before we met for our reflection sessions. In total, we had four of these sessions – two in the first semester and two in the second semester.

## Data analysis

The unit of analysis of this study is the *literacy events* surrounding the multimodal composition process. Operationally, literacy events are defined as



“activities where literacy has a role. Usually there is a written text, or texts, central to the activity and there may be talk around the text. Events are the observable episodes which arise from practices and are shaped by them” (Barton et al., 2000, p. 8). We argue that by looking at the composition process of students with developing proficiency through these ‘events’, we can reflect deeper on the dynamic contribution of the individual students, the tools that they utilized as part of the composition process, as well as our roles as teachers in facilitating their engagement with the tasks.

To analyze the students’ multimodal project, our coding procedures were divided into two main categories: (1) *textual design* – which included content appropriateness, number of words generated and other non-written modalities used and (2) *language use* – which included usage of target vocabulary, and grammar and punctuation errors. In terms of students’ overall language use, we used the three sub-categories primarily to align with the assessment rubric of the required writing portfolios (see Table 2). In terms of target vocabulary, we included all the high-frequency words related to the thematic units listed on the textbook, discussed in class, and searched independently by the students online.

To analyze the autobiographical and interactional contexts surrounding the composition process, we coded the student interviews on the following categories informed by our literature review: (1) choice of topic, (2) process of writing, (3) L1-L2 literacy history, and (4) out-of-school digital literacy skills. We then triangulated the themes emerging from the students’ interviews with our own reflections on the bridging practices (RQ1), as well as the constraints and the role of social mediation (RQ2) in the implementation of the multimodal composition activities.

## Results

*RQ1: How do teachers bridge out-of-school digital literacy through multimodal composition tasks for students with developing proficiency?*

**Textual production.** The data revealed that the multimodal composition tasks were able to facilitate the production of English texts among four students with developing English proficiency.

**Table 2.** Descriptive analysis of focal students’ multimodal composition output

Category	First semester		Second semester	
	Task 1	Task 2	Task 3	Task 4
	Salma <sup>1</sup> (Group of 2 students)	Rooa (Group of 4 students)	Reem (Individual work)	Jumana (Individual work)
<i>Textual Design</i>				
Content appropriateness	Highly appropriate	Highly appropriate	Appropriate	Appropriate
Modalities	Written text	Written text	Written text	Written text
	Visual	Spoken text	Spoken text	Visual
	Spatial	Visual Audio	Visual Audio	Audio
Number of written texts	190	61	67	83
Number of spoken texts	0	416	39	0
Total word count	190	477	106	83
Average word count/ student	80	119	106	83
<i>Language Use</i>				
Number of target vocabulary use	29	34	14	13
Number of grammatical errors	4	30	8	5
Number of punctuation errors	12	0	3	8

As shown in Table 2, of the 100-word paragraph requirement in the first semester, our focal students produced a range of 80 to 119 written and spoken words combined. Unlike the first-semester group, however, our focal students from the second semester produced a lower range of 66 to 80 written and spoken words combined – significantly below the 150-word requirement. This was perhaps due to their starting proficiency, which was below the average proficiency score of their cohort. Nevertheless, as the tasks demanded, they were able to integrate other modalities including visual, auditory, and spatial information to enhance the information that they were trying to convey. In terms of language use, the students were able to incorporate the target vocabulary that they learned into their projects. Yet, as expected from students with developing proficiency, grammatical and mechanical inaccuracies were observed across the four tasks. Upon continuous reflection on students’ submissions, we modified our feedback strategies in the second semester, which we explain further in our discussion about constraints (RQ2).

Another observation that we made was that although we did not limit the

format of the multimodal output – as we introduced a variety of formats in the second week of each semester – most submissions were made in video format. In Task 1 specifically, we received seven individual submissions in video format and 14 individual submissions in brochure format (six students failed to submit their tasks). From Tasks 2–4, all students chose to submit their multimodal composition project in video format. Based on our interview data, the students revealed that the preference to create a video-based project was influenced by their observation of their peers’ works during the presentation/reflection sessions and their individual judgments of the appropriateness of the format based on the demand of the tasks. The latter highlights one of the main affordances of multimodal composition for students with developing proficiency, which we discuss in more detail below.

**Technological bridging.** While the descriptive analysis (Table 2) showed that the multimodal composition tasks that we designed were able to facilitate the production of English texts among students with developing proficiency, we wanted to uncover how the contextual and relational conditions surrounding the tasks afforded their multimodal outputs. By triangulating the students’ interview data with our own reflection notes, we discovered three distinct ‘bridging practices’ that we were able to cultivate over the course of two semesters: *technological bridging*, *identity bridging*, and *semiotic bridging*.

First, our pedagogical choice to transform the traditional 100-word or 150-word paragraphs as multimodal textual design has afforded the opportunity for the students to showcase their out-of-school digital literacy skills by navigating through multiple information and digital tools and presenting them in multiple modalities (i.e., technological bridging). As our reflection note captured:

Quite impressed with Rooa’s group .... [T]he design elements of the video (e.g., the voiceover, the syncing of the visual, textual, and oral elements) really showcased their digital literacy. When I asked them how long it did take to put the video together, Dhikra said that, from conception to editing, it took them almost three days to make. Apparently they were invested in it! (Dian)

The two works below (Figures 1 and 2) showcased the output of this technological bridging:

Al-Murooj Street,  
Building 12  
Email:  
Vintage.Company@hotmail

Vintage Company  
Name of founders :



company vintage

Fall : Edition

2019

### company vintage

The company is interested in manufacturing watches with the best quality.  
Founded in 2009.  
The company is headquartered in Yanbu.  
The company has 399 branches around the world.  
It has 59 factories spread over major cities.

**Vintage Company**  
Offers you the most beautiful  
watches  
With best price  
with high quality



#### head office

Head office is located in Yanbu city  
President's Name [REDACTED]  
The general manager and all other company managers work here at the head office. All branches are managed by the head office

#### Factories

At the factory we manufacture the best watches with professional hands

#### Distribution Center

We take products from factory ,and we distribute product in shops

#### Technical Center

In this place, we are developing watches to get a better shape

We are always looking for new ideas to attract customers

#### Office sales

In this place we offer watches for sale in this place we are always in touch with the customer to receive his views and suggestions about the product

Figure 1. Salma's "Vintage Company" brochure (Task 1)<sup>2</sup>

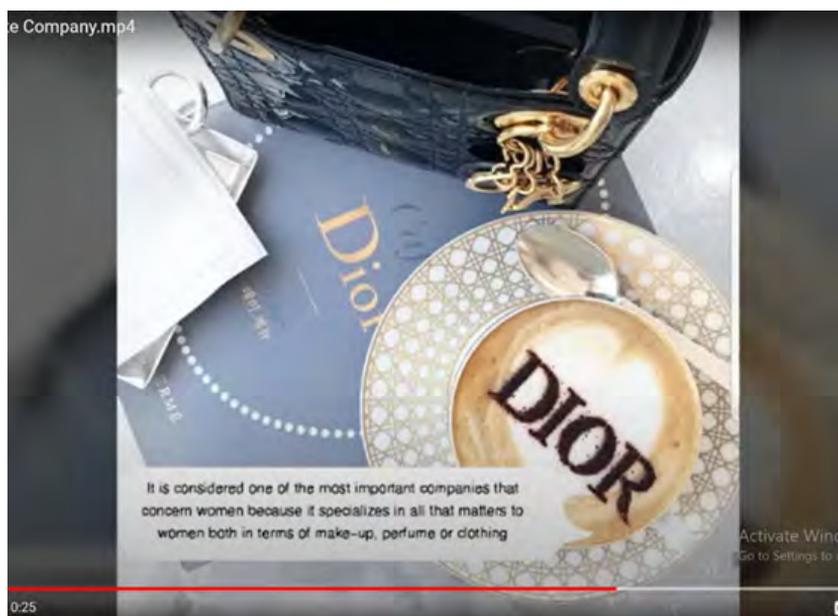


**Figure 2.** Roaa's "How to Shop Online" video (Task 2)<sup>3</sup>

Our interview data confirmed that our focal students found the tasks of making the brochure or the video to be relatively easy. All of them went through the following stages without explicit guidance from us: (a) getting help from friends, Google, or dictionary application to construct the written texts for the project, (b) finding the appropriate application to combine the written texts with other modalities (e.g., Microsoft Word, iMovie, Snapchat, Logomaker, etc.), (c) finding or creating the appropriate visuals to match the written texts, and (d) finalizing the content and the design of the project. When asked about 'getting stuck' in the process of making the project, all responded that they used their prior skills to help them move forward, as echoed by Reem's words:

I have video app on my phone (sic). First, I write paragraph, I find picture, and make video (sic). If I don't know, just google or look on YouTube.

**Identity bridging.** Secondly, our exploration of the students' choice of topic also revealed that they chose to write about things that were personally meaningful to them. When given open-ended prompts<sup>4</sup>, they sought to engage with the activities that were in line with their sense of self or identity. Salma mentioned, for instance, that the task had allowed her to realize her vision as a business owner of a fictitious vintage watch company and therefore wrote and designed the project with this identity in mind. Likewise, as our interview reveals (see also Figure 3), Reem decided to write about Christian Dior because she liked fashion design and the brand.



**Figure 3.** Reem’s “Favorite Company” video (Task 3)<sup>5</sup>

Reem’s case was especially notable for us because she was a quiet wallflower in the class. As can be deciphered from her spoken text, her sentences were barely discernible to a lay English speaker:

I talk about Dior Company [.]<sup>6</sup> Christian Dior is a French company. Known<sup>7</sup> international (sic) as Dior. Is (sic) a company that provides women with makeup products and sells several products to women [.] Based in Paris. I admire Christian Dior every (sic) much.

Yet, despite all these linguistic barriers, the multimodal composition task afforded her an opportunity to participate in class by presenting her video and to receive positive feedback from both the second author as her teacher as well as her peers. As noted from our reflection note:

After viewing this video in class today, it is as if I finally get to ‘hear’ and ‘see’ Reem. Given her level of comprehension and speaking ability, I can imagine how hard it is for her to participate in class. Being the wallflower that she is, now she can finally speak. The video has somehow given her a voice (Shazia).

**Semiotic bridging.** Finally, the third bridging practice that we found insightful from the multimodal composition process was the semiotic bridging. Following the social semiotic view of literacy that we outlined in the theoretical framework, semiotic bridging here means that as teachers, we created opportunities for the students to convey meanings and achieve the social purpose of writing descriptive and process paragraphs, which were commonly practiced in school-based compositions, through different modalities. We did so by engaging them with a real or imagined audience beyond us, the teachers. By choosing to write about her dream company, for instance, Salma was able to use the target descriptive writing skills to promote her business. Similarly, by outlining

the process of shopping online, Rooa could engage with a wider audience on her social media while constructing a desirable identity position as a competent digital content creator. As Rooa said:

I like to do this kind (sic) exercise. I don't make the video by myself, Dhikra helped a lot, but it's fun to see it. It look (sic) good and professional. And you practice your English too. I can put something like this on Instagram, maybe.

When the semiotic goal was set at the forefront, we noticed that the students took risks to string their own sentences together, despite the many linguistic inaccuracies. We received submissions ranging from heavily borrowed texts such as:

How to create virtual reality glasses in an easy way 3D glasses

First *provide the necessary tools* for example magnet and Lenses. and *adhesive tape* and Cartons. Second, install the lenses inside the piece Then put the adhesive tape on the edges of the carton Then place the magnet in the tip of the carton until *it is held together* Finally, we install all the pieces in place and then get the. glasses in a simple and fast. (Jumana's Task 4: first draft, emphasis added)

to more authentic texts with some linguistic inaccuracies such as:

Hello everyone, good morning. Today we will share with you how to shop online, if you want buy clothes or technologies things and what are the common mistakes when you ordering online.... First of all, define what you need. Do you want clothes for school or university or for party? Open Namshi website, select the type of clothes, make sure you pick up the good fabric and the right size, also good color. (Rooa's Task 2: first draft)

Nevertheless, for students with developing proficiency such as Rooa and Jumana, textual borrowing of chunks of texts from the online translation tools was also observed. While acknowledging that this practice might be used as a tool to expand their linguistic repertoire (Marissa, 2013), it was important for us to distinguish textual borrowing with plagiarism (or what we called in class 'lazy copy-pasting'). Therefore, when giving feedback on their work, we made our expectations clear to the students that plagiarism was unacceptable. Although we did not teach paraphrasing skills to address plagiarism at this level, we continuously emphasized and encouraged the skill to 'make your own sentences.' As a result, as seen from the above two samples, the students were able to produce their own sentences.

*RQ2: What are the constraints of implementing multimodal composition for this group of students, and how does social mediation afford the opportunity to address these constraints?*

**Bridging the linguistic gap.** Despite the affordances of the multimodal composition tasks in bridging the technological, identity, and semiotic practices of



our students, we encountered some constraints throughout the process. As we alluded to earlier, we found instances where students borrowed texts from online translation websites. In Jumana’s case (Figure 4), some of her vocabulary (e.g., ‘provide the necessary tools’ or ‘adhesive tape’) and grammar (e.g., ‘until it is held together’) could not have been generated on her own, since they were typically above the level of what students with developing proficiency could produce, nor were they taught explicitly in class.

Secondly, and parallel to their reliance on online translation tools, we found linguistic accuracy to be another constraint for students with developing proficiency. There seemed to be an observed trade-off between our roles in facilitating the students’ out-of-school digital literacy and facilitating their linguistic competence as L2 writers. Although we had given both content-focused feedback (i.e., content appropriateness and organization of ideas) and language-focused feedback (i.e., vocabulary choice, grammatical accuracy, spelling, and punctuation) in the first semester, students tended to uptake our content-related feedback more than language-related feedback.

To address this gap, we modified our feedback strategies in the second semester to include more indirect language-focused feedback, as shown in Figure 4 below:

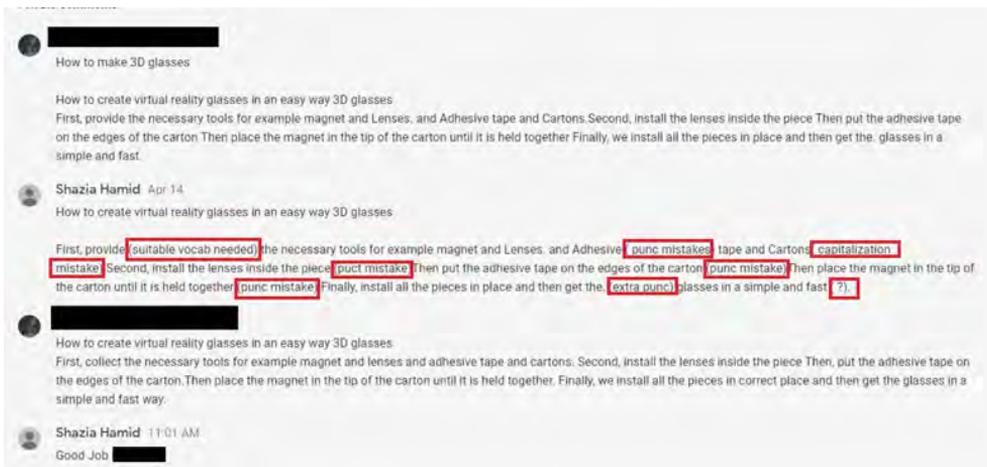


Figure 4. Providing linguistic feedback in multimodal composition

As can be seen from this example, we explicitly drew the students’ attention to appropriate word choice, grammar and punctuation. As part of the editing process, the student was able to uptake some of the linguistic accuracies (e.g., changing the verb ‘provide’ to ‘select’).

**Learner agency through task and interpersonal mediation.** Notwithstanding these linguistic limitations, our findings showed that students with developing proficiency were agentive in their own learning. As we elaborated in the previous results, when given the opportunity to bring their out-of-school digital literacy skills to class, not only did they showcase their ability to design a multimodal text in a personally meaningful way, but they also took risks in

producing novel language as part of their language learning. As Salma mentioned when reflecting on how the process of creating the brochure (Figure 2) helped her with her English as well:

I know I don't write good English. I have grammar mistake, you tell me some of them in class (sic). But I go back to the book and look at the words and use online dictionary to help me remember. Like here (while pointing at the words in the brochure), "head quarter", "manufacture". It's nice.

In this instance, even though the feedback that we gave did not close all the gaps in terms of improving their linguistic accuracy (e.g., there were still grammatical mistake in the word order such as 'Company Vintage,' or in word choice such as 'to get a better shape'), our requirement to incorporate the vocabulary related to the units was able to trigger students' agentic behavior in seeking information from online dictionary.

The open-ended nature of the task allowed them to bring what they knew (e.g., googling information, looking at word definition using online dictionary) and to use it for the multimodal composition task, which highlighted the socially mediated nature of learner agency. The task also afforded opportunities for students to participate in social communication (i.e., through videos and brochures) from a more desirable identity position. It allowed them to use their identity as a point of entry to participate more actively in social interaction (in Reem's case), or to connect the task purposefully to a relevant future self (in Salma's case), or to engage with a wider audience as a confident English speaker (in Roaa's case).

The students' agentic behaviors were also mediated by the multiple layers of social relationships that were built throughout the semester. These included the peer interaction during the composition process (in the case of Tasks 1 and 2), as well as student-teacher interaction during the feedback. As we reflected on our notes:

Overall, I think this multimodal composition project was successful.... They were able to use each other as a resource during the composition process. Of course there's a clear division of labor in each group (A is writing this portion, B is writing that portion, C is doing the editing), but all in all they come out cohesive, which shows a degree of behind-the-scene peer scaffolds (Dian).

Looking back at the difference between how we did the feedback in the first semester and now, I think both approaches complemented each other. When we gave holistic feedback orally in class, the students felt appreciated. We showed them that we were proud of their work. When we modified our strategy to include more focused feedback, they knew that it wasn't all about the look and the fun. They know that we care about their English too (Shazia).

Therefore, based on the textual outputs of the multimodal composition (Table 2) and the social relationships among peers and between the students and



the teacher that we described above, the multimodal composition activities afforded – rather than constrained – student participation and language production.

## Discussion

### *Bridging practices for students with developing proficiency*

In analyzing the three bridging practices, we argue that students – even those with lower proficiency – benefit from the technological bridging. The incorporation of multiple modalities in conveying information allows students to tap into the familiar multimodal ‘texts’ that they consume or produce in their everyday lives (Lim, 2021). This metacognitive awareness, along with the ability to navigate seamlessly across multiple digital platforms, highlighted two essential out-of-school digital literacy skills which the students brought with them to the classroom (Godwin-Jones, 2018; Jenkins, 2006). In the case of the students in this study, for instance, the metacognitive awareness is manifested in their preference to create a video-based project and their individual judgments of the appropriateness of the format based on the demand of the tasks (Lim, 2021). This corroborates previous findings on the benefits of technological bridging in L2 multimodal composition (Cho, 2017; Vandommele et al., 2017).

Secondly, with regards to identity bridging, though writing about something that is personally meaningful is not a new insight, as it has consistently been recorded in the literature (see Barton, 2007; Blommaert, 2008; Street & Hornberger, 2008), it is important to underscore that the snippets of literacy events that we presented in this study demonstrate how students’ identities structured their engagement with texts. In other words, when students engaged with L2 texts, both their production and interpretation of the texts were mediated by their identities, and by how they valued their engagement in the activity (Mercer, 2012; Norton, 2010). Consistent with the results of Smith et al.’s study (2017), our findings also demonstrate that when the content of the composition task can be catered to the identities of lower proficiency students, they are more engaged in the composition process.

Third, in the context of semiotic bridging, one of the biggest challenges in teaching school-based composition to EFL students is to make it meaningful (Elola & Oskoz, 2017). Going back to the social semiotic view of literacy, we know that literacy activity is a meaning-oriented activity because what people do with text is purposeful (Lam, 2009). Yet, this meaning-making aspect is often lost in L2 composition classes. Unfortunately, writing assignments are often framed as an end in themselves, rather than a semiotic means to convey meaning (Gee & Hayes, 2011; Lim & Toh, 2020). With this challenge in mind, teachers can design the multimodal composition tasks so that the students were able to use the school-based composition skills (e.g., writing descriptive or process paragraphs) to do something that was authentic and meaningful to them in their lives beyond schools, just as our focal students have reshaped



their understanding of descriptive and process writing to reach out to real or imagined audience through communicative multimodal means.



*The ‘trade-off’: Are social mediation and learner agency worth it?*

Our data shows that there is a trade-off in terms of the teacher’s role in facilitating learner agency and linguistic accuracy. Focus on content seems to lower the bar on acceptable grammar mistakes. This insight corroborates existing literature on the need for a balanced pedagogical focus on content and accuracy in multimodal composition (Godwin-Jones, 2018). However, reflecting upon our attempt to provide a balanced focus on content and accuracy throughout the multimodal composition process, there are two caveats on interpreting the linguistic inaccuracies among students with developing proficiency.

First, although corrective feedback generally plays a role in improving students’ language development, the nature and extent of this role for this group of students remains in dispute (Ene & Upton, 2014; Ferris, 2010). Secondly, instead of viewing these linguistic inaccuracies as deficiency that needs to be fixed, teachers may take comfort in viewing them as an index of the students’ language development. As Ellis (1996) and Towell and Hawkins (1994) state, though there is a degree of systematicity to learner’s errors, there are also high degrees of variability. Even among those with higher proficiency, students’ sentences seem to vary from moment to moment and in the types of errors that are made. They also “seem liable to switch between a range of correct and incorrect forms over lengthy periods of time” (Mitchell & Myles, 2006, p. 16). Thus, from this perspective, we believe that although students should be given consistent language-focused feedback, teachers need to acknowledge that students’ uptake of those feedback takes a considerable amount of time that often extends beyond the course. From the teacher’s point of view, what is important is to equip students with the skills to go back to the text that they have designed and independently attend to and revise it on a sentence-level for linguistic accuracy. This is when the social mediation of the teacher plays a role in developing students’ sense of agency (Godwin-Jones, 2019; Mercer, 2012).

Our data also indicates a tendency for students with low proficiency to copy-paste some of a huge chunk of texts through online translation tools or external English-based sources. It is important to put this common practice in a more complex, socially-situated perspective. As Marissa (2013) argues, students with developing proficiency often borrow texts in an attempt to convey meaningful information and to gain a more authorial presence in the discourse that they participate in. In fact, as Dzekoe (2017) and Yeh (2018) suggest, such practice allows them to interact and sustain each other in communication, which is the ultimate goal of learning an L2. The task of the teacher, therefore, is to promote this metalanguage (Lim, 2021) about borrowing and designing multimodal texts responsibly so as to increase language production (Darrington & Dousay, 2015; Ozko & Elola, 2016), while at the same time mediating students’ agentive behaviors (Mercer, 2012) by allowing them to use a variety of digital tools to help them produce the target language.

## Conclusion

As teachers, we set out this research journey to answer the practical call for bridging informal, out-of-school digital literacy into an L2 composition classroom. Acknowledging the gap in the literature on exploring the complex process of multimodal composition for students with lower proficiency, we wanted to address how the teacher can engineer the process to make it beneficial for this group of students, just as it has been recorded to be so for intermediate and advanced students (Dzekoe, 2017; Hafner, 2014; Sauro, 2017).

Through this small-scale exploration, we hope to have shown that bridging out-of-school digital literacy through multimodal composition has some potential affordances for students with developing proficiency. The three bridging practices that we have outlined in our findings – technological, identity, and semiotic bridging – have implications for teachers who wish to reimagine EFL composition by connecting it to the authentic digital literacy practices that are almost second-nature to our students (Lim, 2021). To minimize the ‘negative’ side effects of linguistic inaccuracies in the production of textual elements of a multimodal project, teachers should balance the pedagogical focus on meaning making, participation, and learner agency with an explicit attention to error corrections. Yet, teachers should also be aware that, especially for lower proficiency groups, practices like copy-pasting ‘big words’ or ‘complex grammatical structures’ are part and parcel of learning (Marissa, 2013) so long as students do it in an authentic effort to generate genuine sentences.

Finally, we acknowledge that since we are the teachers teaching the multimodal composition as well as the researcher reflecting on the whole experience with our own students, our interpretive lens is subjective in nature. Therefore, further research will be needed to add more detail to the picture emerging from this and previous studies. This includes more controlled study on the comparative linguistic and non-linguistic gains of multimodal composition vs. traditional paragraph/essay writings. There also remains a need to provide a more complex view of multimodal composition and L2 learning (Lantolf & Pavlenko, 2001; Mercer, 2012) to reflect the social turn in the field of applied linguistics. Given the rapid and constant change in the adaption of new technologies in students’ lives, it is essential that teachers keep up with and be reflexive about affordances of emerging digital media (Lim, 2021). Teachers are encouraged to make room for integrating out-of-school digital literacy into their classroom and mindfully engineer the learning environments to promote a sense of agency in our students.

## Notes

1. All names of our focal students are pseudonyms.
2. Source links to Picture 1 and Picture 2 of the brochure.
3. Source link to video.
4. With the exception of Task 4 (see also Table 1)
5. Source links to picture and video.
6. Breaks between sentences were not clear in the actual spoken text.



7. All underlined words were mispronounced.



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## References

- Adler, S. A., (1993). Teacher education: Research as reflective practice. *Teacher & Teacher Education*, 9(2), 159–167.  
[https://doi.org/10.1016/0742-051X\(93\)90051-H](https://doi.org/10.1016/0742-051X(93)90051-H)
- Ahearn, L. M. (2001). Language and agency. *Annual Review of Anthropology*, 30, 109–137. <https://doi.org/10.1146/annurev.anthro.30.1.109>
- Bandura, A. (2008). Toward an agentic theory of the self. In H. W. Marsh, R. G. Craven, & D. M. McInerney (Eds.), *Self-processes, learning, and enabling human potential: Dynamic new approaches* (pp. 15–49). Charlotte, NV: Information Age Publishing.
- Barrs, K. (2012). Fostering computer-mediated L2 interaction beyond the classroom. *Language Learning & Technology*, 16(1), 10–25.  
<http://dx.doi.org/10125/44269>
- Barton, D. (2007). *Literacy: An introduction to the ecology of written language* (2nd ed.). Blackwell.
- Barton, D., Hamilton, M. & Ivanic, R. (Eds.). (2000). *Situated literacies: Reading and writing in context*. Routledge.
- Blommaert, J. (2008). *Grassroots literacy: Writing, identity, and voice in Central Africa*. Routledge.
- Burns, A. (2011). Action research in the field of second language teaching and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (Vol. 2). (pp. 237–253). Routledge.
- Cho, H. (2017). Synchronous web-based collaborative writing: Factors mediating interaction among second-language writers. *Journal of Second Language Writing*, 36, 37–51. <https://doi.org/10.1016/j.jslw.2017.05.013>
- Cole, J., & Vanderplank, R. (2016). Comparing autonomous and class-based learners in Brazil: Evidence for the present-day advantages of informal, out-of- class learning. *System*, 61(1), 31–42.  
<https://doi.org/10.1016/j.system.2016.07.007>
- Cope, B., & Kalantzis, M. (Eds.). (2015). *A Pedagogy of multiliteracies: Learning by design*. Palgrave Macmillan.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Darrington, B., & Dousay, T. (2015). Using multimodal writing to motivate struggling students to write. *TechTrends*, 59(6), 29–34.  
<https://doi.org/10.1007/s11528-015-0901-7>
- Dzekoe, R. (2017). Computer-based multimodal composing activities, self-revision, and L2 acquisition through writing. *Language Learning & Technology*, 21(2), 73–95. <https://doi.org/10125/44612>
- Edwards, E., & Burns, A. (2016). Language teacher action research: Achieving sustainability. *English Language Teaching Journal (ELT)*, 70, 6–15.  
<https://doi.org/10.1093/elt/ccv060>

- Ellis, N. C. (1996). Sequencing in SLA: Phonological memory, chunking, and points of order. *Studies in Language Acquisition*, 18, 91–216.  
<https://www.jstor.org/stable/44487860>
- Elola, I., & Oskoz, A. (2017). Writing with 21st century social tools in the L2 classroom: New literacies, genres, and writing practices. *Journal of Second Language Writing*, 36, 52–60. <https://doi.org/10.1016/j.jslw.2017.04.002>
- Ene, E., & Upton, T. (2014). Learner uptake of teacher electronic feedback in ESL composition. *System*, 46, 80–95.  
<http://doi.org/10.1016/j.system.2014.07.011>
- Ferris, D. R. (2010). Second language writing research and written corrective feedback in SLA: Intersections and practical applications. *Studies in Second Language Acquisition*, 32(2), 181–201.  
<https://doi.org/10.1017/S0272263109990490>
- Gee, J. P., & Hayes, E. R. (2011). *Language learning in the digital age*. T & F Books (Kindle Edition).
- Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, 22(1), 1–15. <https://doi.org/10125/44574>
- Godwin-Jones, R. (2019). Riding the digital wilds: Learner autonomy and informal language learning. *Language Learning & Technology*, 23(1), 8–25. <https://doi.org/10125/44667>
- Hafner, C. A. (2014). Embedding digital literacies in English language teaching: Students' digital video projects as multimodal ensembles. *TESOL Quarterly*, 48(4), 655–685. <https://doi.org/10.1002/tesq.138>
- Ham, V., & Kane, R., (2007). Finding a way through the swamp: A case for self-study as research. In J.J. Loughran, M. L. Hamilton, V. K. LaBoskey, & T. Russell (Eds.), *International handbook of self-study of teaching and teacher education practice* (pp. 103–150). Springer.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York University Press.
- Jewitt, C. (2008). Multimodality and literacy in school classrooms. *Review of Research in Education*, 32(1), 241–267.  
<https://doi.org/10.3102/0091732X07310586>
- Jewitt, C. (Ed.). (2009). *The Handbook of Multimodal Analysis*. Routledge.
- Jimenez-Cacedo, J., Lozano, M., & Gomez, R. (2014). Agency and web 2.0 in language learning: A systematic analysis of elementary spanish learners' attitudes, beliefs, and motivations about the use of blogs for the development of L2 literacy and language ability. In J. Guikema & L. Williams (Eds.), *Digital literacies in foreign and second language education* (pp. 87–118). San Marcos, TX: Calico.
- Kayi-Aydar, H. (2013). Scaffolding language learning in an academic ESL classroom, *ELT Journal*, 67(3), 324–335. <https://doi.org/10.1093/elt/cct016>
- Kemmis, S., & McTaggart, R. (Eds.) (1988). *The action research planner* (3rd ed.). Deakin University Press.
- Kern, R. G. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40(1), 183–210.  
<https://doi.org/10.2307/40264516>



- Lai, C., Zhu, W., & Gong, G. (2015). Understanding the quality of out-of-class English learning. *TESOL Quarterly*, 49(2), 278–308.  
<https://www.jstor.org/stable/43893754>
- Lam, W. S. E. (2000). L2 literacy and the design of the self: A case study of a teenager writing on the Internet. *TESOL Quarterly*, 34(3), 457–482.  
<https://doi.org/10.2307/3587739>
- Lam, W. S. E. (2009). Multiliteracies on instant messaging in negotiating local, translocal, and transnational Affiliations: A case of an adolescent immigrant. *Reading Research Quarterly*, 44(4), 377–397.  
<https://doi.org/10.1598/RRQ.44.4.5>
- Lankshear, C. & Knobel, M. (2013). Social and cultural studies of new literacies from an educational perspective. In C. Lankshear & M. Knobel (Eds.), *New Literacies and Digital Epistemologies* (pp. 1–19). Peterlang.
- Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford University Press.
- Lee, L. (2014). Digital news stories: Building language learners' content knowledge and speaking skills. *Foreign Language Annals*, 47(2), 338–356.  
<https://doi.org/10.1111/flan.12084>
- Lemke, J. (2009). Multimodality, identity, and time. In C. Jewitt (Ed.), *The handbook of multimodal analysis* (pp. 140–150). Routledge.
- Lim, F. V. (2021). *Designing learning with embodied teaching: Perspectives from multimodality*. Routledge.
- Marissa, D. N. (2013). *Intertextuality, identity works, and second language literacy development in the digital media: An ethnographic case study of two Indonesian college students' literacy practice on Twitter*. [Doctoral dissertation, University of Maryland].  
<https://drum.lib.umd.edu/handle/1903/14930?show=full>.
- Matsuda, P. K. (2003a). Process and post-process: A discursive history. *Journal of Second Language Writing*, 12(1), 65–83.  
[https://doi.org/10.1016/S1060-3743\(02\)00127-3](https://doi.org/10.1016/S1060-3743(02)00127-3)
- Mercer, S. (2011). Understanding learner agency as a complex dynamic system. *System*, 39(4), 427–436. <https://doi.org/10.1016/j.system.2011.08.001>
- Mercer, S. (2012). The complexity of learner agency. *Apples Journal of Applied Language Studies*, 6(2), 41–59.
- Mitchell, R., & Myles, F. (2006). *Second language learning theories* (2nd ed.). Hodder Arnold.
- New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1), 60–93.
- Norton, B. (2010). Language and identities. In N. Hornberger & S. McKay (Eds.), *Sociolinguistics and language education* (pp. 349–369). Multilingual Matters.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge University Press.
- Potter, J., & McDougall, J. (2017). *Digital media, culture, and education: Theorising third space literacies*. Palgrave Macmillan.



- Redman, C., & Rodrigues, S. (2014). From philosophy and research to pedagogy and practice. In S Rodrigues (Eds.), *Handbook for teacher educators: Transfer, translate or transform* (pp.1–14). Sense Publishers.
- Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. *Language Teaching*, 50(4), 561–578.  
<https://doi.org/10.1017/S0261444817000192>
- Reinhardt, J., & Thorne, S. L. (2011). Beyond comparisons: Frameworks for developing digital L2 literacies. In Arnold, N., & Ducate, L. (Eds.), *Calling on CALL: From theory and research to new directions in foreign language teaching* (2nd ed., pp. 257–280). CALICO.
- Sato, E., & Chen, J. C. C. (2019). Rise to the occasion: The trajectory of a novice Japanese teacher's first online teaching through action research. *Language Teaching Research*, 1–24. <https://doi.org/10.1177/1362168819846794>
- Sauro, S. (2017). Fandom and online interest groups. In S. Thorne & S. May (Eds.), *Language, education, and technology: Encyclopedia of language and education* (pp. 1–12). Springer.
- Sauro, S., & Zourou, K. (2019). What are the digital wilds?. *Language Learning & Technology*, 23(1), 1–7. <https://doi.org/10.125/44666>
- Shapiro, S. (2014). Words that you said got bigger: English language learners' lived experiences of deficit discourse. *Research in the Teaching of English*, 48(4), 386–406. <https://www.jstor.org/stable/24398689>
- Shin, D. S., & Cimasko, T. (2008). Multimodal composition in a college ESL class: New tools, traditional norms. *Computers and Composition*, 25(4), 376–395. <https://doi.org/10.1016/j.compcom.2008.07.001>
- Silva, T., & Leki, I. (2004). Family matters: The influence of applied linguistics and composition studies on second language writing studies—past, present, and future. *Modern Language Journal*, 88(1), 1–13.  
<https://doi.org/10.1111/j.0026-7902.2004.00215.x>
- Smith, B. E., Pacheco, M. B., & de Almeida, C. R. (2017). Multimodal codemeshing: Bilingual adolescents' processes composing across modes and languages. *Journal of Second Language Writing*, 36, 6–22.  
<https://doi.org/10.1016/j.jslw.2017.04.001>
- Stake, R. E. (1995). *The Art of Case Study Research*. SAGE.
- Street, B. & Hornberger, N. (Eds.) (2008). *Encyclopedia of language and education: Literacy* (Vol. 2). Springer.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Thorne, S. L., & Reinhardt, J. (2008). “Bridging activities,” new media literacies, and advanced foreign language proficiency. *CALICO Journal*, 25(3), 558–572. <https://www.jstor.org/stable/calicojournal.25.3.558>
- Towell, R. & Hawkins, R. (1994). *Approaches to second language acquisition*. Multilingual Matters.
- Oskoz, A., & Elola, I. (2016). Digital stories: Overview. *CALICO Journal*, 32(2), 155–173. <https://doi.org/10.1558/cj.v33i2.29295>



- van Lier, T. (2000). From input to affordance: Social-interactive learning from an ecological perspective. In J. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 145–159). Oxford University Press.
- van Lier, L. (2008). Agency in the classroom. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural theory and the teaching of second languages* (pp. 163–186). Equinox.
- Vandommele, G., Van den Branden, K., Van Gorp, K., & De Maeyer, S. (2017). In-school and out-of-school multimodal writing as an L2 writing resource for beginner learners of Dutch. *Journal of Second Language Writing*, 36, 23–36. <https://doi.org/10.1016/j.jslw.2017.05.010>
- Villamizar, A. G., & Mejía, G. (2019). Fostering learner autonomy and critical reflection through digital video-journals in a university foreign language course. *Reflective Practice*, 20(2), 187–200, <https://doi.org/10.1080/14623943.2019.1575195>
- Yeh, H.-C. (2018). Exploring the perceived benefits of the process of multimodal video making in developing multiliteracies. *Language Learning & Technology*, 22(2), 28–37. <https://doi.org/10125/44642>
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). SAGE.
- Zheng, B., & Warschauer, M. (2017). Epilogue: Second language writing in the age of computer- mediated communication. *Journal of Second Language Writing*, 36, 61–67. <https://doi.org/10.1016/j.jslw.2017.05.014>